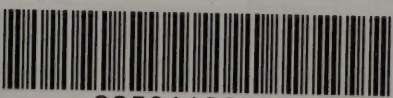


Drawing on the Evidence:

Social Science Research
and Government Policy

**A Report to the Government
through the
Minister of Research, Science
and Technology**



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A Report to the Government
through the Minister of Research, Science and Technology

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30 September, 1995

Hon Simon Upton,
Minister of Research, Science & Technology,
Parliament Buildings,
Wellington, 1.

Dear Mr Upton,

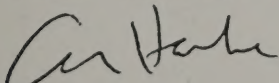
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I am pleased to forward to the Government through you *Drawing on the Evidence: Social Science Research and Government Policy*, the report of the review team which you assembled and to which you gave the terms of reference quoted on p.v.

The members of the review team had disparate experiences. They also had strong views, and the skills and knowledge required to make their views understood. We have therefore had vigorous debates. But we are united in the belief that social science research can contribute to good public policy and thereby to New Zealand society. While we have found that this contribution is already greater than is often realised, we have agreed on a number of ways in which it could be improved. We have therefore prepared a number of recommendations for you and your Cabinet colleagues.

As is explained in our report, much depends not only on Cabinet but on managers, analysts and researchers in both the public and private sectors. We are encouraged in our belief that these people will respond positively to our proposals by the assistance we have had in the course of our enquiries and deliberations. Throughout government departments and agencies, and among social science researchers in the public and private sectors, there is a desire to use social science research for social benefit, whether or not through government policy. We are grateful for the cooperation we received.

Yours sincerely,



Gary Hawke

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"If only they would write in plain English, on one side of A4, on my desk, on the day, I would find it helpful...."

H. Newby, "The challenge for social science: a new role in public policy-making", *Research Evaluation* 4(1) (1994), pp. 6-11.

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REVIEW PANEL

Gary Hawke (convener)

Len Cook

Allan Levett

Lesley Middleton

David Preston

Andrew Trlin

secretariat

Paul Callister

Malcolm Menzies

TERMS OF REFERENCE

Preamble

The Government has decided that the New Zealand Institute for Social Research and Development Ltd should not be maintained as a stand-alone entity within a CRI structure. However a strong applied social science capacity is still required in the core areas of SR&D's activities. Accordingly the Government is appointing a review team to provide advice on how such an applied social science capacity could best be provided. The review will take account of the advantages and disadvantages of past institutional arrangements for providing social science research. It will incorporate an analysis of social science research needs and of purchase arrangements, so that there is a basis for assessing what capacity is required.

Scope of Study

1. To determine the extent and nature of the need for publicly funded social science research and related information bases, both now and in the future, including that required to:

- a support the public policy development needs of the Government,
- b support the other functions (service and regulatory) of departments and Crown entities, and
- c provide a more general social science knowledge and skill base, through the Public Good Science Fund (PGSF); taking account of the Strategic Statement on the PGSF which is due to be issued by the Government in November 1994.

2. To determine how adequately these needs are being expressed, funded and co-ordinated through the purchase functions of departments and Crown entities; and to advise on steps that should be taken to improve the adequacy and effectiveness of purchase arrangements.

3. To determine how adequately these needs are being supplied through existing institutional supply arrangements, and to advise on:

- a the extent and character of any deficiencies in capacity; looking at human resource skills, knowledge bases and institutional arrangements for combining skills and knowledge to provide practical capabilities; and
- b steps that should be taken to rectify any deficiencies.

Consultation

The review team will be required, in forming its report, to consult with key purchasers and suppliers of social science research including all interested Government departments and agencies.

Timetable

The review team will be required to report to the Government, through the Minister of Research, Science and Technology, no later than September 1995.

Source: Annex 1 to CAB(94) M42/13

GLOSSARY

CEO	Chief executive officers
CRI	Crown Research Institute
"departments and agencies"	All government departments, and Crown entities
DSIR	(former) Department of Scientific and Industrial Research
FoRST	Foundation for Research, Science & Technology
MAF	(former) Ministry of Agriculture and Fisheries
MoRST	Ministry of Research, Science & Technology
<i>New Avenues</i>	HRAS (1994) <i>New Avenues for Crown Funded Social Science Research</i> (Wellington: Ministry of Research, Science & Technology, Report No 36.)
NSS	National Science Strategy
PGSF	Public Good Science Fund
SPiR	Science Priorities Review Panel (see para 2.3.5)
SRA	Strategic Result Area (see para 1.1.5)
SR&D	(former) Crown Research Institute for Social Research and Development (Inc.)

EXECUTIVE SUMMARY

A. Context

1. Everybody benefits from good policy decisions and hence from good underlying social science research. Social science research contributes to society's goals in a number of ways. However, the Government is the principal beneficiary of applied social science research and should be the main purchaser of applied social science research.
2. Applied social science research can be defined in a number of ways. On all major definitions, competent social science research is an important potential and actual input into the decisions of Government, especially but not only those in the area generally known as social policy.
3. Users and suppliers of research could be better informed about each others' needs, capacity and outputs. The sector is underdeveloped in relation to comparable research areas in the physical and biological sciences. This reflects the low priority given by successive governments to applied social science research, especially research to support social policy decisions.

B. Government and Social Science Research

1. Government departments and agencies have a variety of social science needs and different ways of meeting those needs. There is no single model for the management of social science research.
2. It is unrealistic to expect Government to provide resources for all feasible and interesting social science research. There has been a desirable shift of emphasis towards linking research to policy issues. The current structure of purchasing social science research to support Government policy as operational research of departments and through the Public Good Science Fund is sound in principle. However, between these two areas there is a critical gap of generic or underpinning research, which neither process meets adequately.
3. In operational research:
 - i. current arrangements are not sufficient for ensuring that the optimal amount of evaluation is built into policy initiatives and they should be strengthened;
 - ii. it is likely that the pricing of policy advice outputs makes insufficient allowance for the cost of participatory research when research problems require a deep understanding of the New Zealand context; and
 - iii. departments and agencies could improve their management of research, especially through a variety of mechanisms which improve communication and mutual understanding among managers of policy analysis and researchers.
4. Statistics New Zealand has a key role in providing basic material for social science research, but it is not used enough. Changes in access limitations, costs and support could enable official statistical databases to contribute more to social science research in New Zealand.
5. The mission of the Foundation of Research, Science & Technology to purchase strategic research in substantial programmes is sound in principle. Some areas of research will not be funded, and the strategic management processes which select the areas in which research outputs are purchased can still be improved.

In particular, the contemporary focus of public policy should be given more weight in strategy development. Research suppliers have prime responsibility for organising projects into programmes appropriate for the PGSF, but social science researchers lack the infrastructure provided by a CRI. In the absence of a relevant CRI, FoRST should be more proactive, within its present mandate, in developing social science capacity.

6. The "critical gap" referred to in paragraph B.2 above is between the operational research undertaken by government departments and agencies and the social science outputs purchased through the Public Good Science Fund. The main components of the gap are in cross portfolio and longitudinal social research. The PGSF Output 13, "Society and Culture", remains small, and the projects it funds have not been regarded by government departments and agencies as supplying the strategic research that is required. A number of ad hoc research funding coalitions have been developed by government departments and agencies but they tend to be shortlived. Major longitudinal research and survey programmes are difficult to fund. There is no systematic strategy linking the Government's Strategic Result Areas to applied social science research.
7. We propose that the gap should be tackled through two structures akin to National Science Strategies and directed specifically to the principal components of the Government's SRAs. They should bring together relevant government departments and agencies and the Foundation for Research, Science & Technology. It is important that the strategic research undertaken satisfies the quality assurance processes of the PGSF. We propose periodic reviews of the suggested mechanism, and of the nominated topics of research.
8. For funding, the committees could begin like existing NSS committees, promoting the required research by collaboration among participating departments and agencies and FoRST. As Government proceeds towards its commitment to raise public investment in research and development from 0.6 to 0.8% of GDP, it should increase its purchases of the research for which we have identified a gap. This will be partly through increases in the PGSF and either:
 - increased purchases of outputs from participating departments which enable those departments to fund additional research; or
 - non-departmental output funding managed by the new committees and providing research outputs desired by participating departments and a strategic element which satisfies the quality criteria of the PGSF; or
 - some combination of these.

C. Ensuring Adequate Supply of Applied Social Science

1. New Zealand is a small (but not insignificant) supplier of social science research, but local knowledge and expertise is needed. The Review Panel found that the government's need for social science capacity and the objectives of suppliers of social science research are better integrated than often thought.
2. There is a need for better communication about research among the government departments and agencies and between them and social scientists. It is especially important to invest in the time needed to ensure a common understanding of what is required and the extent to which it can be achieved by social science research.
3. It is essential that social science researchers be encouraged to cumulate knowledge so that smaller projects are not repeated endlessly and that larger problems are addressed. In addition, government departments and agencies should make every effort to explain how specific projects fit into larger

requirements and make research results and procedures available for further scrutiny. We propose electronic clearing house arrangements that are actively managed.

4. Tertiary institutions provide social science training and important links between New Zealand and the international literature. It is important to Government that these valuable resources are fully utilised by frequent appropriate contact between departments and agencies and the educational institutions. While tertiary institutions cannot easily respond to tactical research requirements, they can more readily participate in larger strategic programmes, though not without cost to government.
5. Human resource development for researchers employed in government departments and agencies is important. It has improved in recent years, and the area where further improvement could most readily be achieved is in providing clear signals to social science training establishments of what is required to develop recent graduates into effective researchers.

Recommendations

1. Government should recognise that it is the principal beneficiary of applied social science research. (1.2.5)
2. Cabinet should reinforce existing guidelines for including provision for evaluation in policy proposals and request the State Services Commission to give explicit attention to the implementation of these guidelines as it appraises the performance of chief executives. (2.2.5)
3. The pricing of policy advice outputs should be revisited to ensure that there is adequate financial recognition of the cost of "participatory research". (2.2.6)
4. Cabinet should establish Committees along the lines of those used for National Science Strategies for research into "Strategic policy populations" and "Transition to employment". Cabinet should appoint convenors to initiate discussion with participating departments and agencies about membership and appropriate funding arrangements. (2.2.13-19)
5. Cabinet should reiterate the mandate of FoRST to be proactive about developing the social science industry so that needs for social science research can be met more easily in the future than they are now. In particular, FoRST should facilitate initiatives to establish networks of researchers and cumulation of knowledge in family studies and work studies. (2.3.15-16)
6. Cabinet should give sympathetic consideration to the argument that Government should buy more services from Statistics New Zealand in the form of research which is strategic for the committees referred to in recommendation 4, and in support structures for researchers using statistical datafiles. (2.4.3-6)
7. Cabinet should invite government departments and agencies to ensure their research connects with their policy development needs, especially those central to the SRAs of the Government. (2.1.14-15; 2.2.4)
8. Cabinet should reiterate the importance of research to its "ownership interest" in Government departments and agencies. Departments and agencies should be able to show that they are investing so as to be able to meet future demands from governments. Good investment will be demonstrated by systems to ensure an adequate supply of good quality staff, sound systems for the management of

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research contracts, sufficient in-house training of researchers and policy analysts, and participation in clearing house and fellowship schemes. Cabinet will want to compare the relative effectiveness of departments and agencies in these respects as it monitors progress towards raising public investment in research and development from 0.6 to 0.8% of GDP. (2.1.16, 3.2.3-7, 3.2.10-11, 3.4.5-10)

9. Cabinet should note that there are no explicit mechanisms for the purchase of research outputs from tertiary education institutions, and that if these were developed they should relate to the educational objectives of those institutions. PGSF research and operational research should be purchased through mechanisms other than Vote: Education. (3.3.6)

Chapter 1

The Context, the Problem and the Enquiry

- i. Social science research has a key role in the development of better policy.
- ii. Each of the terms "government", "policy", and "social science research" can be understood in several ways.
- iii. For our purposes the principal aspect of Government is the Executive.
- iv. The Executive's demand for social science takes several forms of which the most important are:
 - * operational research by government departments and Crown entities
 - * public good social science
- v. "Policy" can mean the central decisions of Cabinet and the work leading up to those decisions, the activities of individual ministers, or the general guidelines which any large organisation needs for promoting consistency among decisions on individual cases. For our purposes, this last category includes the management policies of departments and Crown entities which deliver services in response to Cabinet decisions. Our concern is with policy in the sense of central decisions and in this management sense.
- vi. Even the familiar distinction between "economic policy" and "social policy" is becoming less significant. The central policy decisions are being shaped by the development of Strategic Result Areas.
- vii. We elected to take an inductive approach to "social science research", the common core of which is a systematic approach to understanding the interaction of people. The principal issue for the Executive's demand for social science research is the interaction between social science research and the development of good policy advice.
- viii. Social science research relates to society in many ways. This report deals especially with social science research and government policy, but the Review Panel is aware of the other channels by which social science research affects society.
- ix. Government is the principal beneficiary of social science research. While many parts of society benefit from social science research, it is appropriate that Government is its chief purchaser.

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The Context, the Problem and the Enquiry

1.1 Government and Applied Social Science

1. This Review is essentially concerned with the "extent and nature of the need for publicly funded social science research and related information bases." Less formally, it is about the desirable relationship between the government and social science research.
2. "Government" encompasses an array of institutions and processes. Many people identify the "Government" with the "public sector", paying most attention to whatever institutions of the public sector most affect their daily lives. This may be hospitals, schools, the court system, a state owned enterprise, or any other of a range of organisations. All of these organisations need information in order to meet the requirements of their clients or customers or to meet the expectations which citizens have of public institutions. Because "research" is often understood to be more or less equivalent to "securing information" and because "social science research" is often understood to be more or less equivalent to "research about people", the relationship between Government and social science research can be conceived as very wide and varied.
3. The Review Panel has kept this wide understanding very much in mind, especially as its terms of reference enjoin it to consult "all interested Government departments and agencies". It is aware, for example, that it is likely that Parliament and its Select Committees will in the near future have an increased demand for independent sources of information, both empirical information and informed analysis. However, the Review Panel is confident that the principal focus of its terms of reference is the need for social science research of the Executive, as evidenced by the attention paid to purchase arrangements.
4. Even so, the needs of Government for social science research are varied. The terms of reference draw attention especially to:
 - a. the public policy development needs of the Government,
 - b. the other functions (service and regulatory) of departments and Crown entities, and
 - c. a more general social science knowledge and skill base, through the Public Good Science Fund (PGSF).

These can be summarised into:

- * operational research by government departments and agencies
- * public good social science research

where the former, which relates to a and b, has been usefully defined as "research undertaken by a department to enable it to provide an output which is purchased by the Government",* although we extend the meaning to encompass Crown entities as well as departments, and the latter refers to the social science content of the the PGSF (which is not confined to the specific "Society & Culture" output category used for the PGSF.)

It is, however, not always possible to confine discussion to the Executive independent of the more political aspects of Governments. Cabinets are composed of ministers who wish to be re-elected to Parliament. They therefore want their actions to be understood by electors, believing that understanding will promote approval. Governments therefore want well-informed electorates,

* *Social Policy Research for Government: The Report of the Working Party on Operational Social Policy Research* (Wellington: MoRST, 1990), p. 17.

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and the social science research capacity which informs electors goes far beyond operational research and public good social science.

5. Our terms of reference refer both to "the public policy development needs of the Government" and "the other functions (service and regulatory)" of departments and Crown entities". It is not yet widely appreciated how much change has been affected in the management of policy development in the public sector in recent years. Many people think that "policy advice" is a matter of telling ministers what they should do, and do not appreciate the expensive nature of the processes which are required for analysing options, advising ministers on what options are available to them, and what are their advantages and disadvantages.

Even within government departments, individuals focus on their own responsibilities and some still think that "policy" refers to whatever interests ministers. Outside the public service, "policy" is often understood in its everyday sense of the general rules and guidelines which seek to facilitate and to make more consistent decisions on individual cases.

It takes time for understanding of major changes to be disseminated. A few years ago, there was a great deal of confusion (as well as some legitimate argument) about the concept of "outputs" applied to government departments, especially those which are principally providers of policy advice. Now there is less confusion and more specific attention to the implications of "output specification". In the course of this Review, we explored aspects of understanding of Cabinet's adoption of a process of strategic management which is stated in the document "Strategic Result Areas for the Public Sector 1994/5 - 1996/7" which was publicised at the time of the 1995 *Budget*. We found that chief executives of government departments were well aware of its significance but that this understanding has not penetrated very far downwards in many departments.

6. The Strategic Result Areas were important to us as a key summary of Government's interest, and they are referred to elsewhere in our report. They highlight a distinction which we have had to grapple with continually. Our brief is with the Government's interest in applied social science capacity, but a lot of the concerns expressed to us refer to social policy.
7. The distinction between "economic policy" and "social policy", with the latter usually focused on health, education and welfare, is long established and will be part of the public consciousness for a very long time. It became blurred with the development of "environmental policy" which crosses the boundary between "economic" and "social" more than was the case with longer-established labels like "foreign policy" or "defence policy". More important, in the last decade, the centre of attention has been the "role of the State" or the use of resources in the public sector to achieve collectively-determined objectives. Decision-makers have come to call for research that is appropriate to problems at hand, irrespective of the disciplines from which the research originated. Use of the generic term, "policy analyst", has become widespread. To some, this has appeared to be "managerialism" or an unhealthy domination of economic thinking. Whatever we may think of such criticisms, the public sector has implemented an integration of defining objectives and allocating resources which is unlikely to be reversed. We are unlikely to return to a separation of "social policy" and "economic policy". The SRAs cascade from "economic opportunity" and "enhancing social cohesion" both of which involve both economic and social aspects. Our concern has therefore not been confined to a distinct area of social policy.

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8. In more concrete terms, while we have been especially concerned with the government's need for social science research in the areas of health, education and welfare, we are convinced that it is much wider than that. This is perhaps most obvious in the policy concerns of agencies like the Ministry for the Environment, but the Ministry of Commerce, Department of Conservation, Ministry of Foreign Affairs and Trade, the Ministry of Defence, and other departments and agencies are major users of social science as they perform their policy responsibilities.

9. We took an inductive approach to "social science research" and how it is "applied". The local adaptation (by MoRST) of the international "Frascati" definitions of types of research:

- Fundamental
- Strategic
- Applied
- Experimental development
- Technology transfer

provided a framework for some of our questions but we were as interested in how our informants understood the term, "social science research".

We define social science research as the application of scientific methods to social phenomena. *New Avenues** p.3 added, "In particular, we take social science research to mean work on distinct projects or programmes of research designed to uncover new knowledge. This is in contrast to work which largely involves the relaying or synthesising of new knowledge developed by others (as for example during the preparation and delivery of a teaching session, or in the preparation of a reading list). This wide definition leaves room for some practitioners trained in the humanities, such as historians and philosophers, to consider themselves social science researchers of a type, especially if their interests include investigating and generating new knowledge about aspects of the human condition or experience." These views were generally shared by the Panel and by our informants.

10. There were two aspects of "social science research" which were especially important to us. The first is that Government's need is not so much for "social science research" as such as it is for information which is relevant to policy development, one of the sources of which is "social science research". (The information sought may be either empirical or conceptual.)

11. The second is that "social science" is a loose concept in that it includes a number of disciplines and a variety of approaches to the study of social phenomena. The same observation could be made about "earth sciences" or "biological sciences" or any of the other high-level divisions which are conventionally made in the way we organise knowledge, whether for purposes of managing teaching programmes or for classifying collections of books.

It can be argued that definitions of disciplines are important for such purposes but have little relevance to research which focuses on problems and brings to bear on them relevant concepts and techniques of analysis irrespective of their disciplinary origins. However, disciplines are more than collections of concepts and techniques. They have their own internal momentum, and influence which problems are recognised as significant and worthy of attention. "Applied social science" (or "applied science") is more problem-

* Health Research & Analytical Services, *New Avenues for Crown Funded Social Science Research* (Wellington: Ministry of Research, Science & Technology, Report No 36, 1994.)

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oriented, but even so, recognising which disciplinary perspectives are relevant is far from simple.

12. Terms like "life sciences" and "earth sciences" are understood as aggregations. This is not always true of "social sciences". As was said by one of our informants, "In many agencies, there is a lack of understanding of the disciplinary basis of the social scientists they employ.... Consequently, graduates are often asked to do research in areas for which they have limited training. It is a little like asking a graduate in chemical engineering to design a bridge or a plant ecologist to do soil analysis."

It is, of course, possible to be precious about disciplinary distinctions and to engage in "turf protection". Lack of respect for professional skills is as common among social scientists as between social scientists and their employers. And those who are engaged in teaching tend to respect the skills they teach more than the ones which are gained through experience, including experience in policy analysis.

What is really distinctive about social science is that it studies people in systematic ways. The subjects of social science themselves respond to it and change, so that knowledge is less enduring than it is in some other fields of study.

Social science research encompasses a very wide array of skills and ranges from short probes to thorough evaluation studies, from brief information gathering to authoritative surveys, and includes statistical analysis, forecasting, cost-benefit analysis, computer simulation and gaming, econometric modelling, programme evaluation, social impact assessment, survey research, and qualitative analysis of observations, interviews and documents. Historical analysis is increasingly relevant as well.

13. It is a commonplace but true observation that the impact of research is often unpredictable. What begins as a purely intellectual exploration of a concept proves to have practical applications, as was the case with input-output accounting. Or what begins as a specific issue proves to have very wide implications.* The lag between concept and application can be very long - 30 years or so in the case of road pricing, for example - or an application can lead to conceptual development.** The transmission of research into the policy decisions and actions of Governments are likely to be highly varied. The notion of a smooth transition from research to development to application is as inappropriate in social science as anywhere else. None of this relieves us from a need to decide what resources should be devoted to research.
14. In attempting to understand the relationship between research and policy, many writers have indicated the need to understand the behaviour of politicians, the pressures on their time, and the wide range of channels of information, informal and formal, open to them. Coleman (1991) suggests that

* e.g. the exploration of pricing policies for the French electricity generator and the whole question of public utility pricing which still occupies our courts and others in the case of telecommunications. Jacques Dreze "Forty Years of Public Economics: A Personal Perspective" *Journal of Economic Perspectives* 9(2) (Spring 1995), pp. 111-30. Any number of such cases could be cited.

** e.g. the role of participation in arms limitations talks for the development of game theory where the preferences of the other side are unknown, John C. Harsanyi "Games with Incomplete Information" *American Economic Review* 85(3) (June 1995), pp. 291-303. Again, any number of cases could be cited.

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the only decisions made on the basis of research findings are politically unimportant ones. Weiss (1982) believes research information has to resonate with policy makers before findings are utilised, and Wagenaar (1982) talks of policy as having an ideological nucleus which renders its proponents "immune to counter evidential research results". All these writers point to the importance of keeping primacy of politics firmly in mind when considering the role of applied social science research in government policy.* Most of this analysis was developed in the United States where the separation of powers between the Executive and the Congress enhances the political element in policy making, but the points have weight in the New Zealand context too. Researchers contribute to the process which forms policy, but do not determine policy.

15. We do find it helpful to think of some particular kinds of research.

Operational research is "research undertaken by a department to enable it to provide an output which is purchased by the Government"#. Generic research is "operational social policy research aimed at developing policy options on comprehensive social policy issues which require perspectives wider than those of particular departments."## It is clearly related to interdepartmental research, which is simply research managed with contributions from more than one department.

16. It is, however, possible to divide up the continuum of kinds of research in various ways, and one which the Panel has found useful is shown in Table 1. It shows three kinds of research outputs presently purchased by Government: in column 1, the operational research purchased by government departments and agencies; in column 3, the national strategic research purchased by the PGSF; and in column 4, the "blue sky" research purchased by the Marsden Fund or acquired from tertiary institutions. It is also the starting point for identifying where current arrangements could be improved. Column 2, "The Gap" is explained in the next chapter in paras. 2.2.9-19. While the terms of reference of the Panel direct attention to the Government's need for research and we have explained our interpretation of this, Table 1 reminds us that not all social science research is directly relevant to policymaking and accountable through the normal processes of the public sector. We are, in particular, well aware of the Marsden Fund, but little concerned with it because it is not intended to be closely related to Government's priorities. Table 1 is also the starting point for identifying where current arrangements could be improved, a topic which is taken up in the next chapter.

1.2 The Context

1. Our terms of reference direct us especially to the government's need for applied social science capacity.

* D. Coleman, "Policy Research - who needs it? *Governance: An International Journal of Policy and Administration* 4(4) (1991), pp. 420-55; H. Wagenaar, "A Cloud of Unknowing: social science research in a political context", in D. Kallen *et.al.* (eds.) *Social Science Research and Public Policy Making: A reappraisal* (Windsor, Berks. 1982); C.H. Weiss, "Policy Research in the Context of Diffuse Decision Making" in *ibid.*

Social Policy Research for Government op.cit., p.17

ibid. p.6

Table 1: Principal Types of Social Science Research Purchased by Government - with a proposed Addition

	Operational	"The Gap" (See chapter 2)	National Strategic	Blue Sky-
Definition	Develops policy options and monitors and evaluates agency policies /interventions/ actions as decided by political decision-makers.	Addresses socio-economic contexts of government policies as defined by inter-departmental committees in consultation with FoRST.	Addresses socio-economic issues as defined by national goalsetting processes.	"Curiosity-driven" research
Principal Funders	Central government, local government, commercial organizations, non-profit, voluntary sector.	Government departments in various combinations plus PGSF involvement when appropriate.	PGSF, Central Government via Statistics NZ, Health Research Council Some central government agencies	Marsden Fund, Universities, private foundations - local and overseas
Principal Suppliers	Central and local government in-house research units contractors - private and public	Inter-departmental ad hoc research teams; private contractors and tertiary institutions.	Statistics New Zealand, private contractors universities and polytechnics Crown Research Institutes	Universities private contractors Crown Research Institutes
Main Forms of Research	Monitoring & evaluation of policies/actions. social impact assessment, action research, systems analysis, model-building.	Research into "strategic policy populations" and "transition to employment".	Trends analysis, longitudinal studies, database construction, theory construction.	Exploratory research, theory-building

All forms of research require the usual professional standards of objectivity and rigour, and use a wide range of methods including both qualitative or quantitative study. They each should make provisions for the cumulation of knowledge and results and methodology should be publicly available and subjected to professional scrutiny.

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2. We have conceived our task very much in terms of the demand by Government for social science research, whether for operational research, for PGSF research, for research in other public functions such as universities and the Health Research Council, and for research which contributes to the government's desire for a well-informed electorate. We have also been concerned with whether there is a capacity to supply that demand.
3. That naturally leads to thoughts about the market for social science research. There are other sources of demand for social science research. (By "demand", we mean willingness to purchase, not merely desire.) Companies require social science research, especially in the form of market research and in the social science research which underlies or is part of a whole range of management studies. The voluntary welfare sector has a similar range of demand for social science research. So do many other voluntary associations.
4. Our terms of reference do not require us to investigate the many questions which could be asked about this part of the market for social science research. (We could, for example, ask about how it fits within the current regulatory framework for competition policy, or what form of self-regulation it applies to its product standards.) We have, however, considered whether any proposals we wish to make would disrupt the private sector part of the market and satisfied ourselves that they do not.
5. We have been equally interested in whether the private sector of the market benefits from the government's participation in the market. Clearly it does. Market researchers are significant customers of Statistics New Zealand; personnel consultants use techniques developed by psychologists, and management consultants benefit from academic studies in management (and contribute to them). However, we find no barriers to ensuring that appropriate charges are already made for such contributions or can be made by appropriate use of intellectual property legislation. It is a chimera to think that there is a large private sector appropriation of public expenditure on social science research.

1.3 The Enquiry

1. Our enquiry focused on the perspectives of those involved in the commissioning or providing of social science research. There were those who argued that a large scale description of the volume and type of applied social science research in New Zealand was needed to meet our terms of reference. This was not possible in the time available, and, more significantly, the intertwining of research and policy outputs made the task of identifying stand-alone research outputs extremely difficult. The Panel, therefore, concentrated its effort on exploring the relationships between the key stakeholders.
2. Consultations with key stakeholders were carried out from July through to September, 1995. Firstly, the research industry was divided into two broad, but at times overlapping, groups. These were those providing social science research and government departments and agencies purchasing the research. These groups came to be known as the "demand" and "supply" sides of the industry. Given the time and resources available, and taking into account the extensive consultation with the providers of research during the preparation of the *New Avenues* report, it was decided to place most of the focus on the those purchasing social science research.

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3. Consultation with purchasers' of research was carried out in four ways. First, CEOs of a selection of major government agencies were interviewed. In addition to providing useful data in themselves, the initial interviews in this process provided a guide to the issues generally facing government agencies in the utilisation of social science research, and helped in the development of a written questionnaire. This questionnaire, along with a letter providing an invitation of comment on any issues arising out of the Terms of Reference, was sent to a wide range of government departments and agencies. In order to canvass the views of those with more of a close day to day focus on policy development, policy managers from a non-random set of government agencies were invited to attend "focus" group discussion. This took place in Wellington on Wednesday 26 July within the setting of the electronic decision support centre at Victoria University of Wellington. These managers were individually asked to respond to a number of questions, but with opportunity for interaction amongst the participants. Finally, a number of Ministers were consulted. In order to supplement this formal process of consultation, some of the Review Panel members held informal discussions with a small number of senior policy analysts.
4. Our consultations with providers of social science research were carried out using three focus groups, in Auckland, Wellington and Christchurch. The participants were selected to cover a range of interests and types of organisation, including university researchers, private research organisations, and individual contractors, and drawing on a wider geographical coverage than the three cities where the meetings were held. However, while there was an attempt to gather together a relatively wide range of people, it was recognised that this did not provide full representation of the research community. In Auckland and Wellington the discussion took place within the setting of an electronic decision support centre, but this was not available in Christchurch. We also benefited from the contemporaneous consultations which FoRST organised in relation to its own strategy development. (As with the "demand" side, individual members of the Panel also benefited from informal consultation with a wide range of people from the social science community.)
5. Three case studies were commissioned as part of the Panel's investigations. Their key objective was to assess whether the suppliers of social science research had demonstrated any capacity to meet or even anticipate the demands articulated by policy analysts working in particular parts of the Government's Strategic Result Areas. Information was collected for the case studies through interviews, both face to face and telephone, written requests for information, and reviews of the available research literature. They dealt with the following topics:
 - What research has been undertaken on what is meant by health gain and how health gain is to be achieved and measured?
 - What research is available on the sort of incentives needed for people to make the transition out of benefit dependency and towards workforce participation?
 - What sort of research is available on the programmes and curricula that are needed to enable an increasing proportion of children, particularly "at risk" children, to receive effective early childhood care and education?Our interest was in the processes of research rather than the research results available in these areas.
6. In an effort to discover the numbers and quality of staff involved in the social science industry, we analysed changes in appropriate occupational categories

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in the censuses from 1971 to 1991. Statistics New Zealand was very cooperative in helping us meet our deadlines. The Review Panel was glad to learn that the Royal Society of New Zealand is promoting a major survey of New Zealand researchers, including social scientists. The information it promises to provide would have been very useful, but required more time than was available for this report.

7. The proposals formulated in this report drew from the ideas and information offered by all those consulted. Ultimately, however, the recommendations in the report represent the Review Panel's solutions to the issues identified. The Review Panel members drew on their varied experiences and the forum provided by the approximately weekly meetings of the Panel itself as well as on the information gathering exercises.
8. The outputs of the focus group discussions (which are in a form preserving individual confidentiality) are available from MoRST to interested researchers. So is a summary prepared by the Review Panel's secretariat of the responses to the questionnaire distributed to government departments and agencies. The case studies commissioned by the Panel from Lesley Middleton & Melissa Weenink, Josephine Lynch and Pamela Hanna, and edited by Lesley Middleton, are available in the same way.

Chapter 2

Government and Social Science Research

- i. Government departments and agencies use a variety of organisational structures for managing research within both policy development and service delivery. We are not unhappy with this variety. It may be, however, that the sum of what is optimal for each individual department is less than optimal for the government as a whole.
- ii. In the core "policy agencies", there has been a trend towards integrating research within policy analysis. Everybody engaged in policy development, ministers as well as departments, would like more information. But information is costly, and the critical issue is whether information is being secured to the point where its benefit ceases to justify its cost.
- iii. Government is not sufficiently anticipating information needs about those sections of the population which are the focus of major policy decisions.
- iv. We identified a need for improvement in the management of social science research across all government departments and agencies, in order to develop a more coherent strategic approach, to reduce transactions costs, and to develop human resources.
- v. We see room for improvement in the pricing of policy advice outputs to make more effective the existing injunction to include an appropriate evaluation component, and to better reflect the cost of participatory research in those situations where the research problem requires an understanding of the New Zealand context.
- vi. There is a need for something like a "National Science Strategy" for areas particularly related to the Strategic Result Areas adopted by the Government. There should be an emphasis on longitudinal studies and other social trend analysis, and on surveys, to provide the New Zealand context in which social issues are addressed.
- vii. We noted little awareness among government departments and agencies of the value of the Public Good Science Fund to their endeavours. There is a critical gap between departmental operational research and the strategic research which the Foundation for Research Science & Technology is prepared to purchase with the PGSF. Our proposed arrangements for NSS-like structures will help overcome this gap. We also propose some developments in how FoRST approaches social science research.
- viii. The Panel understands the difficulties which the Ministry of Research, Science & Technology has in organising an appropriate methodology and process for establishing priorities for the PGSF, but notes that the methodology used contains factors which have tended to be used in a way which introduces an inherent bias against social science research. It also noted that attempts by the SPiR panel to require social science to be carried out within all output classes of the PGSF have been somewhat watered down in the final Government Statement.
- ix. The considerations about the strategic development of social science research need to be placed in the context of the Government's proposed "RS & T 2010" strategy, which proposes a cross-portfolio approach to the "science envelope"

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in order to take up the Government's commitment to increasing public investment in research science and technology from 0.6 to 0.8% of GDP.

- x. FoRST's mission is to purchase "strategic research in large chunks" and not to organise social scientists, but facilitation of researchers who lack the infrastructure of a CRI is not incompatible with FoRST's responsibilities. We encourage FoRST to be proactive about developing the social science industry so that needs for social science research can be met more easily in the future than they are now. In particular, FoRST should facilitate initiatives to establish networks of researchers and cumulation of knowledge in family studies and work studies.
- xi. FoRST could improve the way it deals with emerging areas of knowledge, both in the process by which programmes and projects are selected, and in how it facilitates social science research in those areas.
- xii. Statistics New Zealand has a key role in providing basic material for social science research. Changes in access limitations, costs and support could enable official statistical databases to contribute more to social science research in New Zealand. Statistics New Zealand has adopted an approach of improving access to statistical databases for research purposes, and this needs to be successful for the recommendations of this report to be achievable. Statistics New Zealand, and other public agencies need to work together more vigorously to ensure that existing limitations of finance, support capability and technology are reduced.

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2.1 Operational Research

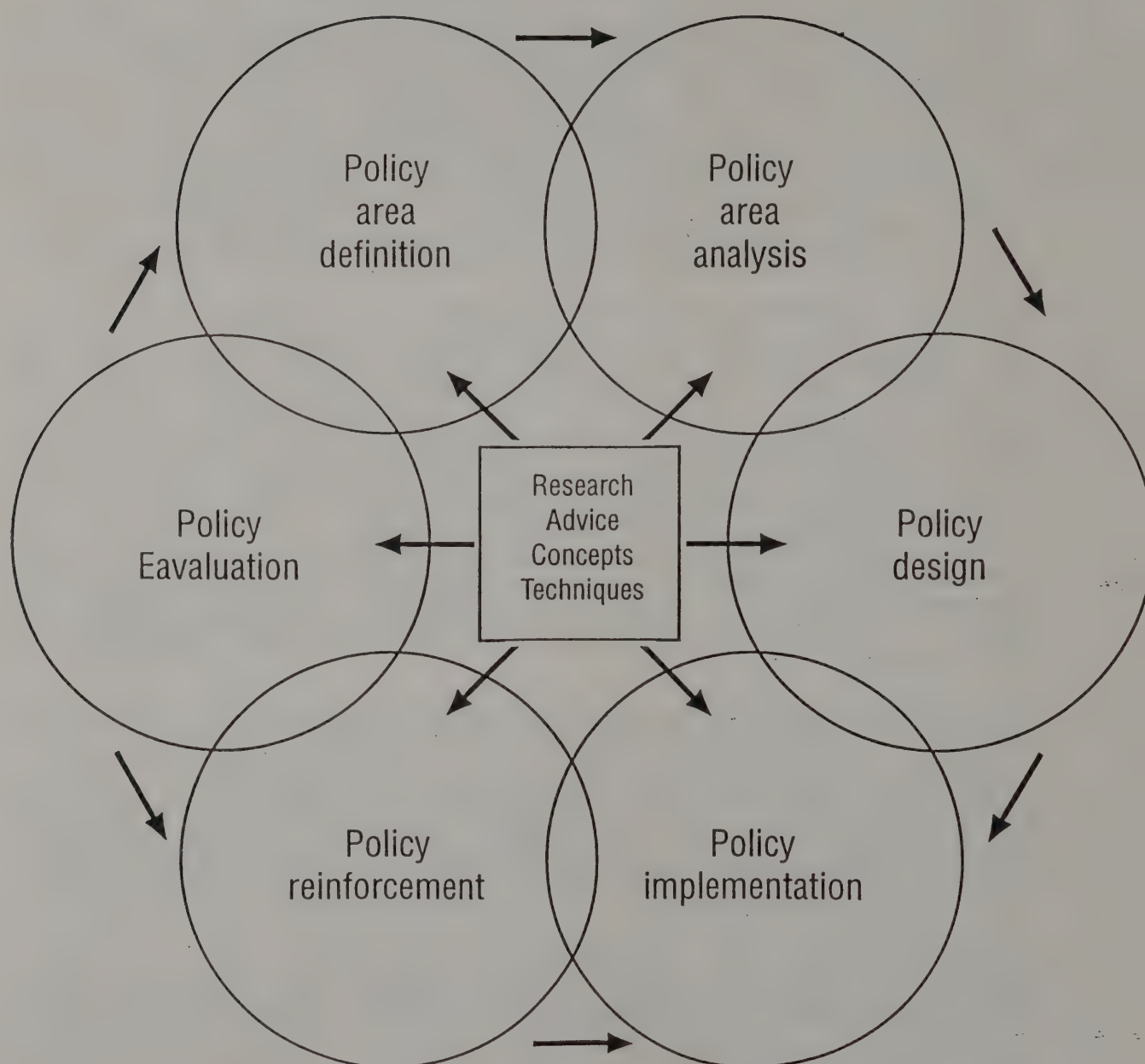
1. Government departments have made different choices about how they manage the social science research they require. Furthermore, the management structures of departments are under continual review, and some are clearly revising how they make decisions about what research is worthwhile.
2. The policy process is a complex one which can be represented as including problem definition, analysis, design, implementation, reinforcement and evaluation. (See Figure 1).^{*} In all of these areas, research advice, concepts and techniques are relevant. There is almost invariably a need for a distinct process in which research results are processed for use for policy purposes - the conventional academic approach of drawing "policy implications" from a research project is remote from what actually happens.
3. Social science research can provide a diagnosis of issues which are likely to become policy relevant (Policy area definition). Once it has been agreed that policy will need to be formulated, social science research can contribute to the description and analysis of broad policy areas (Policy area analysis), or can be formulated tactically to serve the needs of immediate policy execution (Policy design). As decisions become embedded, social science research can provide an assessment of the constraints on the achievement of agreed policies and ways to overcome them (Policy implementation), and provide concepts to synthesize and analyse existing information to support policy operations (Policy reinforcement). Finally social science research can investigate the operation and effect of particular policies (Policy evaluation).
4. All kinds of experience and sources of thinking can contribute to policy area definition research. University research is especially important in drawing on the international literature and suggesting questions which can be asked in the New Zealand context. This research is generally initiated by the researcher, whether or not in a University, and it has a peripheral location in decision making. It may, however, act as a sensor at the earliest stages of policy making. We found government departments and agencies concentrating their energies on commissioning research to serve the immediate needs of policy. We could find no obvious connection between whether the research was commissioned to develop a broad understanding of a policy area or merely to synthesise existing information and the model chosen for the management of research within the government department or agency. These models involve obtaining research in-house or by contracting with an outside provider or by some combination of these processes.
5. The key choice between outsourcing and in-house research is the specificity and objectivity that can be got from the former (if it is well managed) versus the flexibility of the latter, along with the way that in-house research can be directed to the applied end of the spectrum but is more likely to be "contaminated by the policy process" - that is, the research results may be influenced, either directly or in the choice of research questions, by the policy recommendations for which the department or agency has a prior predisposition, perhaps because of a previous recommendation.

Another factor taken into account in the decision as to whether or not to contract out research relates to departments' or agencies' own level of in-house capability and whether or not they wish to develop this expertise by performing

^{*} Peter Brannen, "Research and Social Policy: political organizational and cultural constraints", in F. Heller (ed.) *The Use and Abuse of Social Science* (London: Sage, 1986)

FIGURE 1

Social Science Inputs to the Policy Process



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research, even at the risk of compromising quality in the initial stages. Research may also be contracted out in order to tap into external infrastructure, for example the surveys and databases of Statistics New Zealand and market research firms.

6. While the choice between outsourcing and in-house research is the key one to which departments have responded, there are other alternatives. The strengths and weaknesses of alternative models are set out in Table 2 below.
7. There has clearly been a trend towards greater integration of research with policy development. Some social science researchers regret the loss of a "research culture" within government departments. Such a view is more often found among academics than among commercial research organisations. It is also sometimes found among public servants who now have less freedom to set their own work programmes. But it is an aspect of the need to align costs and benefits in the short- and medium-term for more effective resource allocation within government departments. The State Service Commission's document, *The Policy Advice Initiative*,* exhorted policy managers to ensure that research units or contractors produce research that is relevant to the policy agenda; "There is a danger of research being driven by the researchers which is not appropriate in a department whose purpose is to meet the needs of government." This injunction has been heeded.
8. The distinction between "research" and "policy development" is not self-evident and different people use the terms differently. In-house research may be managed either through a dedicated research unit or by requiring units concerned with policy analysis to make their own decisions about what proportion of their effort should be devoted to research. Systematic deployment of ideas and of empirical evidence is required as policy development proceeds closer to the point of preparing Cabinet papers to facilitate ministerial decisions as well as in detached exploration of problems. Some people in Government departments conceive themselves as specialist researchers, and some as managers of research, but others see themselves as policy analysts who are sometimes engaged in exploratory research and sometimes in synthesising research results, whether their own or others, into proposals for policy development. There are, of course, specific research skills and knowledge, which may be held within government departments and agencies but which are often bought from outside even when research is predominantly in-house. However, the absence of a clear distinction between research and policy development, along with devolved decisionmaking about how Government departments should be managed, implies that it is not easy to do more than form an approximate assessment of how much social science research is performed by government departments and agencies. The Public Finance Act directs that the public accounts are concerned with outputs rather than inputs, and operational research is an input.

Methods of obtaining social science research

9. On the basis of submissions from government departments and agencies, supplemented by material from four focused discussion groups (one from the demand side and three from the supply side), and follow-up questioning of senior policy managers and analysts in several departments and agencies, we can provide the following description of the ways in which social science research is obtained:

* *The Policy Advice Initiative: Opportunities for Management* (Wellington: State Services Commission, 1992), p. 23

Table 2

Alternative Models for Publicly Funded Research

	Strengths	Weaknesses
1. Tenured Academic Researchers	<ul style="list-style-type: none"> a. Takes advantages of individual interests and enthusiasm b. Diversified potential areas of research c. Sometimes group into focused teams 	<ul style="list-style-type: none"> a. Lack of priority setting b. Weak linkages between providers and users c. Inability to work full time on projects - increases project length
2. Funded Research Institutes and Central Research Funding Agency	<ul style="list-style-type: none"> a. Allows priorities to be set for major areas b. Can finance longer term programmes c. Allows build up of specialised expertise 	<ul style="list-style-type: none"> a. High risk of narrowness of focus b. Risk of weak links between providers and users c. Highly prone to provider capture d. Some political constraints
3. Commercial Contract Research	<ul style="list-style-type: none"> a. Very flexible b. Client oriented c. Can deliver results rapidly 	<ul style="list-style-type: none"> a. May not build up appropriate skilled knowledge base b. Does not usually sustain programme research c. May be political constraints on what is researched d. Sometimes superficial analysis of data
4. Major User Department Research	<ul style="list-style-type: none"> a. Brings providers and users together b. Develops areas of expertise c. Allows focus on key policy issues 	<ul style="list-style-type: none"> a. In practice subject to funding squeeze b. Cross-departmental projects difficult c. May be political constraints on what is researched
5. Voluntary Agency Research	<ul style="list-style-type: none"> a. Uses enthusiasm and special interest b. Links users and providers 	<ul style="list-style-type: none"> a. Often low quality and vehicle for special pleading b. Scale often too small for professional viability

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A. Departments and agencies which obtain their social science research by negotiation or by contracting out.

(i) Largely by negotiation with and via other departments and agencies:

These departments and agencies usually have skilled social science staff who can define research requirements in relation to their core mission but they do not have substantial resources to purchase research. They rely on knowledge of what they want, they make extensive use of secondary sources and they use their skill at negotiating, and small amounts of funds, with other departments and agencies which do have the resources to undertake research which is helpful to all involved.

The impression the Panel gained is of departments and agencies that carefully think about their requirements after detailed examination of overseas and local relevant literature. Their responses gave a clear picture and they listed the network with which they are in touch. Statistics New Zealand is prominent.

On the whole they are satisfied with social science research in general but point to several unmet needs. These are all in the area of social cohesion research. Some would be met by social trend analysis which is of interest to a number of departments and agencies, but which is specific about gender, race, children or culture. These agencies say that government is not well-provided with social science research analysis because of a shortage of core background data and a lack of a social science knowledge repository.

(ii) Departments and agencies which obtain social science research by contracting out:

In general these agencies have staff with social science background and are able to specify their requirements. While some specify particular areas where they find research difficult to obtain, they are on the whole satisfied with the social science research they receive. They have knowledgeable staff who obtain research by contract, usually with a particular cluster of providers who have become somewhat specialised in responding to their requirements - preferred specialist providers. (Some are interdisciplinary, but sometimes the agency takes the responsibility for ensuring that it brings all relevant disciplines to bear on a particular research problem.) However there are a number of ways by which government departments and agencies will satisfy their research needs, including one combining with another, or with others, or with a private contracting firm or university researchers to seek joint funding, even from the Public Good Science Fund. Combinations are less frequent than some would hope because the transaction costs of getting together and managing joint operations are said to be considerable.

The unmet needs of these departments and agencies are for long-term and large-scale research required as a background to their policy development. They include monitoring and analysis of trends in relation to sections of the population on which policy is focused, for example, children at risk, or immigrant groups including those whose experience in New Zealand is especially positive, or on the impacts of certain laws and regulations, or on wage patterns.

B. Departments with in-house social science research capacity

These are mostly departments with a substantial operational component to their work; with relatively large budgets; and with a longish tradition of conducting

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in-house social science research, usually via research units. Most departments with in-house research capacity previously possessed research units, which were managed and accountable in a variety of ways arising from the manner in which they were established. The former research units have usually been broken up and the research staffs are now working in smaller groups located in strategically important policy areas. Some departments have also retained central research units to service a variety of policy areas. Each department has its own organisational arrangements for research, partly depending on the historical situation and the nature of the dominant research required and partly on the way in which the reforms were handled in particular departments. In all cases, they are more closely associated with the policy analysts than hitherto. At the same time, specialist research is procured by contract, with a similar range of possibilities as described in A (ii). There is no single model.

In general these departments are satisfied with the social science research they obtain from within their own budget in the various ways described. They tend to have specialist contractors as preferred suppliers. The picture that emerges suggests that the departments, via their policy analysts, are becoming more discerning about the research they require and are improving their ability to say exactly what they want (though there is still a call from demand and supply sides for more dialogue and improvements to the contractual arrangements). As a result, specialist social science contractors who mostly service the needs of a limited range of government departments have increased in number. The more exacting standards of both *what* is required and *when* it is required make it increasingly difficult for social scientists in university teaching departments to respond to the operational research requirements of the departments although they may still be engaged as advisers on research design or as reviewers. Some universities have established specialist research units with staff who are full-time or nearly full-time, which operate essentially on a similar footing to the private research groups.

These government department and agency respondents expressed some dissatisfaction with current social science research, and this can be listed under three themes:

- i. Contract work can be insufficiently policy-oriented, because of a lack of knowledge of the issues; an inability of social science researchers to communicate their results - particularly the academic ones who are oriented towards publication in journals; or because of poor specification of the research questions in the first place - often the result of insufficient dialogue between the manager and the researcher.
- ii. A shortage of expertise. Some agencies indicated that there is comparative lack of social scientists with certain skills, for example in survey methodology. It was also suggested that there is a dearth of senior researchers with cumulated knowledge.
- iii. It was claimed that there is a lack of baseline statistics in a number of areas of government activity. In some cases, ways of recording events have changed and no new enumerating systems have been established (especially in the area of children and families at risk and appearing before various government agencies); in other cases because the necessary data are not collected (particularly for labour market issues).

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Perspectives on knowledge gaps:

It appears that after the State Sector reforms at the end of the 1980s, as the newly structured government departments began to operate in more focused and accountable ways, there was a preference for short-term or tactical research relating to day to day policy issues. Meanwhile society continued to change, new problems received public recognition and government departments and agencies were asked to address new and larger issues as well.

Policy managers in almost all the departments and agencies we consulted now point to the lack of a kind of knowledge that comes from longer-term or larger-scale strategic research, especially about newly recognised problems concerning particular sections of the population, such as the poor aged, new immigrants, long-term unemployed, early school leavers and the unskilled, victims of family violence and other kinds of families and children at risk, rural communities, and people with certain kinds of disability and ill-health. These examples are drawn especially from submissions of social policy departments and therefore tend to suggest that government is concerned only with what might be seen as failure. Other departments and agencies were less inclined to cite specific examples, but the list would look more varied if we added issues such as coping with the effect on foreign policy of more active nongovernment organisations which are much better informed as the result of internet communication, or the dynamics of innovation, or the broad trends of social attitudes towards enhancing the environment. Government is particularly concerned with assisting people who have problems even when they make efforts to be self-reliant, as is clear from statements of Government policy such as *Towards 2010*, *The Next Three Years*, and *Investing in our Future*, and the Strategic Result Areas it has specified, but those documents also show clearly its other objectives, and social science research contributes to all of them. In any case, research about successful initiatives can contribute to identifying and developing approaches to remaining problems. The Panel interprets the most important research need about which its informants were talking as concerned with monitoring and analysis of trends, and especially about the need for background or baseline knowledge so that emerging trends can be recognised quickly. Evaluation of existing policies and the potential for effective new policies can then proceed on a more informed basis.

The specified research is of direct use to government departments and agencies, and is more specific than the strategic research targeted by the PGSF. In the past it was often considered in the processes of FoRST to be appropriable by departments and to be operational, and it was not funded by PGSF. It falls between the tactical operational research most commonly called for by government departments and agencies and the strategic research funded by PGSF. Here is a critical gap. It is illustrated in the second column of Table 1 in chapter 1.

Some of the knowledge required is of use to more than one department or agency and some of it relates to the recently defined Strategic Result Areas now incorporated into the performance agreements of Chief Executives. There are already examples of costly data collections being funded by combinations of interested departments, and they will be stimulated by the cross-departmental nature of the SRAs. A post-census survey of people with disabilities is to be conducted by Statistics New Zealand in 1996, and is being paid for by a consortium of departments including Labour, Social Welfare, Health and Statistics. However, policy managers told the Panel that such joint efforts are difficult to arrange and impose high co-ordination costs on the research process.

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Managing research resources

10. A key finding from the information gathered by the Panel is that a variety of models for managing social science research is used in government departments and agencies. Variety is not in itself a reason for criticism. On the contrary, where we lack information, accumulating experience with a variety of models is to be welcomed. Furthermore, the existing range of models has not been chosen arbitrarily. Many of the departments and agencies we received information from have recently been reorganised, and some are in the process of reorganisation. (Only a few have reached the position where reorganisation is a matter of continual improvement such that it is not in itself a major exercise.) Those reorganisations have resulted from careful evaluation of the objectives of the departments or agencies, and equally careful evaluation of the resources and personnel available for achieving those objectives. There must therefore be a presumption that each agency has chosen a model which suits its activities and resources.
11. While there is considerable flexibility in the ways in which research is obtained, most departments and agencies, including those with in-house capacity, purchase research by contracting with outside suppliers. This has several consequences:
 - a. specialised social science research is required, and a much wider range of knowledge, from simple to highly sophisticated, is now provided;
 - b. the number of specialised research providers has increased;
 - c. departments and agencies have tended to develop a small range of preferred suppliers; and
 - d. specification and management of research contracts have become crucial skills inside departments and agencies.
12. We also noted in paras. 2.1.7-8 a trend towards closer integration of policy advice with research. Some concerns were reported to us that this trend overlooks the different requirements of research and policy development, but we think that these concerns are exaggerated. Both policy analysis and research require a sound understanding of techniques for acquiring and processing information, and they require similar values of honesty. There are more differences between either research or policy analysis, on the one hand, and management of policy development on the other. This poses issues of human resource development within departments and agencies and some have been more successful than others in providing alternative career paths so that the positions with higher salaries do not always go to those with management responsibilities but may recognise the value of experienced and high-quality researchers and analysts who do not have talents in management.
13. We also received testimony that the integration of policy advice and research has the implication that research has become dominated to a greater extent by very small and precise exercises. Such arguments also require care. They can be a coded complaint that researchers used to have more freedom to pursue their own interests and are now required to concentrate more exclusively on the objectives and responsibilities of their employers. While there is good sense in terms of personnel management in providing researchers with opportunities to explore what interests them and to recharge both intellectual enthusiasm and accumulated knowledge, the focusing of resources on the responsibilities of departments and agencies has been an intentional and thoroughly justified part of the public sector reforms.
14. Complaints that research has become more short term and confined can also be misconceived. The design of any large programme of research has to be divided into manageable components, and those who are given responsibility for the

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components do not always understand how they fit into the larger vision. For example, projects on participation rates in tertiary education institutions, rates of return to postcompulsory educational qualifications, and on the validity of performance indicators for assessing the results of school managements, may appear to be distinct projects. But they may also be components of a larger programme of research which informs policy development about changing trends in human capital formation in a more internationally-competitive economy. We are, however, persuaded that the complaints are not wholly misconceived. There is good reason for departments and agencies to be more explicit about how their research projects fit into their larger concerns. This is really an aspect of research management, and the most important reason for this recommendation is that while there is now better management of research than was the case in the past, there is still room for improvement. We are convinced that research resources, whether in-house or contracted, are better used if more time is invested in ensuring that researchers understand what the department or agency expects to gain from the research being commissioned, and if those who commission research understand the constraints on what any researchers can deliver. A by-product of this is that those who carry out specific research projects have a better understanding of how their work relates to larger programmes. Researchers are then encouraged to look beyond their immediate concerns. They are better able to ensure that links between separate projects are fully exploited. There would be less sense of "reinventing the wheel" and more likelihood that successive research is cumulative rather than repetitive. This assumes, of course, that those who commission research and those who undertake it respect the knowledge and expertise of each other. We are not suggesting that there should be more tolerance for researchers who want to substitute their own interests for those of their employers. We are suggesting that communication is crucial; a social science clearing house of the kind we propose later has an important role to play. (Paras. 3.4.6-10)

15. Our view, then, is essentially that management of operational research can be improved. There is a further dimension when we consider whether the decisions of individual departments and agencies will produce an aggregate of research which is optimal in its amount and direction. There are transaction costs in reconciling differences of objectives, and in working with different expectations and conventions. There are also legitimate concerns about departments and agencies "free-loading" on the research of others. But there are also costs in trying to run single monolithic institutions, even if that were feasible when research is increasingly integrated into policy analysis. The sensible objective is not to eliminate the costs of co-ordination but to minimise them, and the single most important element in that is that research managers and researchers in different departments and agencies have to earn and retain mutual respect for one another. The compartmentalisation of government departments and agencies requires separate treatment of different aspects of the lives of individuals, families, households and communities in a way which is quite different from how they actually function. This may make it difficult to measure critical interdependencies, interactions and causes. It is no easy task, therefore, to reconcile research design with policy focus.
16. It was clear to us that departments and agencies that had invested in their human resources reaped the benefits in terms of the quality of their policy advice output. We would encourage departments to provide opportunities for both researchers and policy analysts to upgrade their skills. *New Avenues* summarised the variety of options for developing social science providers, including establishing applied social science fellowships. This was a way of encouraging secondments between universities and government staff and a mechanism for producing theoretical and empirical enquiry on research questions that are of fundamental concern to Government. In general, while it is

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up to individual government departments to utilise their training budgets and make their own staff investment decisions, the Government as a whole invests in researchers through its post-graduate fellowships. We believe there is scope to extend the New Zealand Science and Technology Post-Doctoral Fellowships either by tagging one or more of the existing fellowships for social science or by introducing applied social science fellowships.

2.2 Suggestions for Change

1. Researchers will always want more analysis. Ministers want to be confident that the decisions they make are the right ones, not only in pursuit of electoral success, but because they want to build a record of achievement. They have the authority and the need to act, and need the information that informs their actions. This sometimes produces a sense of tension with departmental advisers and a belief that better research would mean that ministers were exposed to less risk. There is less recognition that those policy advisers face the same uncertainty (except in electoral fortunes) and they too would prefer more information. However, uncertainty in human affairs cannot be eliminated. This is especially true about the future, although the past is often also uncertain as has been discovered by many who want to base their actions on experience. Decisions often have to be made on the basis of the best information available; the only way to improve the information would be to delay deciding and that may not be the best option. Securing information - often better conceived as "developing" information as it may involve conceptual work as well as data collection - is costly, and there will never be enough resources to pursue all possible research.
2. Although there is some nostalgia, the Review Panel judges that the research underlying policy decisions is now better than it was. However, the ambitions of governments have also become more demanding. While governments have shed some responsibilities, they have sought to make state intervention more effective. They therefore want more focused interventions, and they expect more from the resources devoted to interventions.
3. It is right that they should, and we have therefore paid a great deal of attention to where we are most likely to secure improvements in the government's use of social science research.
4. An important and time-tested means of monitoring social science research is by professional scrutiny. This means making the results and the methodology publicly available. This can be done through the publications of particular departments and agencies, or simply by ensuring that results are reported and made accessible, and that information about work in progress and completed is made public. (See paras. 3.4.6-10). Two recent trends have mitigated against this: the focus on short-term information gathering, and the increased use of contractors who claim commercial confidentiality. Departments and agencies should take seriously the obligation to make their social science research results and methods widely available for professional scrutiny, applying it to all research and making commercial contracts as consistent with it as possible. This step not only monitors the research but is important as a check on the cumulation of knowledge concerning a particular problem area. Departments serve their own future interests by helping social scientists to evaluate their research and ensuring that future contractors start from a higher initial level of knowledge.
5. There is good reason to believe that we could improve the management of research which is part of the process of evaluation of interventions.

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"Evaluation" can occur at several levels.* Some will be directed to general assessment of the record of a government. It is best located as part of the independent discussion of social, economic and environmental trends by scholars and commentators independent of the government. Some, however, is an essential component of policy development, as shown in Figure 1-on p.14 above. No policy development should be proposed without an accompanying programme for evaluation. There are management issues to be resolved; it is certainly possible for evaluation to be so enthusiastic as to amount to pulling up a plant just as it is being established in order to examine its roots, so killing an incipient success. The timing of evaluation has to be carefully managed. So does the level of aggregation. Evaluation is costly, and the resources devoted to it have to be justified. Like other forms of research, it has to be adapted to the needs of Government, not to the perfectionist demands of experts in its theory. Evaluation also has to be integrated with personnel management. There is a common cycle in which an initiative begins as the proposal of a policy analyst and is resisted as impracticable by practitioners in the field; when it is implemented, the practitioners acquiesce grudgingly, and then become enthusiastic about it; they then regard evaluation as implicit criticism of what they have come to regard as their own improvement. So carrying out effective management requires diplomacy and skill in human relations. The longer term implication is that, as a result of management training, evaluation should be regarded as routine rather than a disruptive one-off exercise.

6. It is commonly said that policy analysts are aware of the importance of evaluation but are unable to persuade ministers that it should be provided for in the purchase agreements between ministers and chief executives. When the minister's demands on the department have to be reconciled with the limits on the resources available to the department, evaluation is sacrificed. This view is contested by some ministers and some chief executives, and we note that the *Purchase Agreement Guidelines 1995/96* provide for inclusion of "the regular evaluation of government policy impacts on outcomes". As we observed above, judgement is required to establish how much evaluation should be conducted, and the Panel's view is that we are currently investing too little in it. It is indeed the purchase agreement which is crucial in deciding what evaluation will be performed of the extent to which government intentions are being realised. Our view is that evaluation is very clearly part of the policy process, and that the ethics of senior public servants should prevent them from acceding to a purchase agreement without appropriate provision for evaluation. Professional ethics should be reinforced in the performance appraisal of chief executives by the State Services Commission. (This can be expected to cascade downwards in the chief executives' appraisal of their staffs.)
7. This is not the only part of the departmental output specification process where we see room for improvement. Our observation is that some areas of policy development are better supported with operational research than others. To some extent, this might be explained in terms of the quality of the staff engaged and the quality of their management, or in terms of the extent to which the research problems are well understood and rely on techniques of analysis which have been well developed in the international literature. But then this suggests that in the costing of policy advice outputs, there has been insufficient allowance for the cost of acquiring underlying research of comparable quality in fields where these characteristics are lacking. In particular, we suspect strongly that there is inadequate appreciation of the cost of participatory research where the research problem depends strongly on the local New Zealand

* Judith Davey (ed) *Social Assessment in Central Government* (Wellington: Institute of Policy Studies, 1995)

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context. We are aware that there has been some allowance for this, especially in the research budgets of some departments which allow them to employ consultants and contract researchers. Our point is that the degree of recognition is insufficient.

8. When looking at the reasons for poor performance of schools in some parts of New Zealand, for example, or the extent to which health services are provided in a form which makes them accessible to particular populations in certain regions, or any other comparable research, the international literature should be drawn on, as should accumulated local knowledge, (and very often the key research will be of this kind for which cost/quality comparisons are similar to those in the case of research on, for example, the nature of an optimal Crown balance sheet). However, adding to the knowledge base will require labour-intensive local research, using academic skills but gaining the confidence of the relevant population and understanding their views and experience. If we want policy built on such information to have the same quality as that which requires only other forms of information, we must expect to spend relatively more on research. This is not a licence for profligate expenditure on research anywhere, but if we elect to develop policy in such areas and want to have the same confidence in policy decisions as is available in other areas, then we have to incur greater research costs. The pricing of policy advice outputs should be revisited with this consideration in mind.

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9. Governments have become more demanding especially in the information they want on social change. Successive governments have wanted to empower people to make their own decisions in a number of areas, but to ensure that those least able to manage for themselves nevertheless have access to a reasonable participation in community life. Governments therefore require more information about groups such as those who use the Children & Young Persons Service of the Department of Social Welfare (and indeed some of the users of the Income Support Service of the same department) or the parents of those who are "children at risk" or pupils of schools "at risk" and who pose policy issues to the Ministry of Education or to the Crime Prevention Unit of the Department of Prime Minister & Cabinet.
10. Our consultations with ministers, government departments and agencies, and social researchers have all led us to conclude that there are two areas around which these particular information requirements can be grouped. They can be described, somewhat loosely, as "Strategic policy populations" and "Transition to employment". They relate to the two broad areas of the Government's SRAs, "enhancing social cohesion" and "economic opportunity". More investment would be justified in providing information on which policy development in these areas could proceed.
11. The need is especially for information about the longer-term experience of the relevant people, and for information targeted closely to the people of most relevance. It therefore takes the form of well-focused longitudinal studies, including trend analysis, panel studies, and time series analysis, and, as longitudinal studies of realistic cost could never provide information about large enough samples of relevant disaggregations, of focused surveys which build on the longitudinal studies. Some of these studies are required by several government departments and some are needed by one major department. Even in the latter case, there are likely to be overlaps.
12. The issue is essentially one of investment, and it would be reasonable to ask why, if the need is so obvious to us, it has not been obvious to departmental managers

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13. We therefore favour a new device. We have drawn on the concept of a National Science Strategy (NSS)* which has already been applied to the problems of possum control and climate change and which is being applied to further areas of research. The existing NSSs are concerned with strategy-formulation, bringing together the major actors in a particular field of research, disseminating information, and seeking consensus on the relative fruitfulness of particular kinds of research. At present, purchasers of research remain independent, but are influenced by the proceedings of the NSS committees. The extent of this influence is evolving, and we have yet to see whether an NSS committee will be sufficiently persuasive to stop some lines of research and transfer resources to other more promising lines of research. Our enquiries lead us to believe that an NSS is more likely to be successful if it deals with a well-focused area of research, and if it brings together a number of purchasers of research.
14. Both of the suggested areas in which applied social science research should be devoted to policy issues are well-defined. The research required is partly operational, partly research of the kind performed by Statistics New Zealand, and partly "strategic research in large chunks", the focus of the PGSF. They would therefore bring together a number of purchasers of research.
15. Our proposal differs from the existing NSS concept in some respects. Our concern here is with the gap we have identified in the provision of social science research for the needs of government which goes beyond the operational requirements of individual departments. It is more weighted toward the demand for research and less toward dialogue and consultation among suppliers and between suppliers and purchasers than is the case with the existing NSS committees. Elsewhere we make separate but related proposals for dialogue among suppliers and between them and purchasers. (Paras. 3.2.1-12) It is primarily for this reason that we propose two distinct structures related to the principal components of the Government's strategic objectives. These structures are not intended to cater for social science research in general.
16. We would like to go further than the existing NSS committees in providing for a purchase responsibility for our new structures. We are keen to overcome the transaction costs of interdepartmental negotiations, and we are convinced that there is a need for additional research of the kind defined in the preceding section of this report. However, we recognise that trust needs to be built among departments and between departments and FoRST, and we therefore suggest that the structures should begin mainly as consultative ones relying on discussion and persuasion to influence the purchases of research (including in-house research) by participating departments and agencies. The new committees would not only provide advice on the effective coordination of current research. They would also be in a position to direct attention towards the gaps in information which need to be filled. They will be able to advise purchasing agents such as FoRST of the kind of research which needs to be funded to fill those gaps. The

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committees' work would not duplicate FoRST's Social Science Advisory Committee or the Foundations research strategy for the PGSF as the impetus will be centred on distinct topic areas and not on the totality of social science research. The committees may promote reviews of particular areas and plan new programmes, including costing them. They may act by agreement among the members to disseminate seeding money to research groups to develop proposals for PGSF funding, fund an expert to produce a "state of the art" review of an area of research, or fund a fellowship in a specified area.

17. The financial arrangements for these structures need further debate and will undoubtedly develop over time. We recommend that as Government moves towards its declared objective of increasing its spending on research from 0.6 to 0.8% of GDP, it should facilitate purchasing through the processes of these new structures. That could take several forms. If our advice about the pricing of departmental outputs which involve relatively expensive labour intensive investigation of the New Zealand context is accepted, participating departments (and other departments which perform the same kind of research) would have additional resources and be required to make decisions about whether it should be used directly or invested in the kind of research on which our proposed structures are focused. A significant element of this kind of research is of the same form as the outputs which the Government purchases from Statistics New Zealand and it may be that there should be additional purchases from Statistics New Zealand in the form of a Non-Departmental Output Class where the particular research to be provided can be determined by the proposed structures. Finally, this research has elements of both operational and strategic research, so that the PGSF is properly involved. This has the advantage that the quality assurance processes of the PGSF would be brought into operation. The research could proceed only if the clearly strategic part of it wins funding in competition with other claimants on the PGSF.
18. We therefore recommend that Cabinet establishes something analogous to an NSS for each of the specified areas, appointing an independent convener for each one, and requiring reports to the Cabinet Strategy Committee. The committee for "Strategic Policy Populations" should include Statistics, Social Welfare, Education, Health, Internal Affairs, Treasury, Women's Affairs, Te Puni Kokiri (TPK), Pacific Island Affairs and FoRST; that for "Transition to Employment" should include Statistics, Education, Social Welfare, Labour, Treasury, Women's Affairs, TPK, Pacific Island Affairs and FoRST. As implied above, the functions of the committee are not to be exclusive to member agencies. Other departments which are prepared to cooperate both in organising research and in contributing to them by including payment for the clearly operational research component should be able to do so. (The precedents of the existing NSS are encouraging in this respect.) There should clearly be appropriate evaluation of the proposed structures. We recommend that each committee be required to provide an evaluation of its own effectiveness in its first three years. We also note that the Department of Prime Minister & Cabinet advises the Prime Minister on a range of similar issues and is in a good position to evaluate the effectiveness of each structure, with special attention to whether they continue to be the appropriate areas in terms of Government's strategic interests, whether they should be supplemented with structures which reflect a change in the foundations of Government's strategic management, or whether they should be replaced with new structures because those strategic objectives have changed.
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funding for Output 13 almost doubled, the amount allocated was still only 3% of the PGSF. A number of factors in the priority-setting methodology were applied in such a way as to produce this result, despite the high strategic weighting given to the output by the SPiR:

- i. The SPiR's low scoring for research potential, ability to realise benefits, and research intensity. The low scoring for ability to realise benefits relates to the level of organisation and strategic coherence in the field. That for research intensity relates to the extent the sector is dependent on investing in research for its success. All of these assessments can be contested.
- ii. The low scoring for "appropriateness of PGSF funding" which was based on the assessment that most social science research needs are met through the universities (funded by Vote: Education) and operational research (funded by the relevant Votes). We explain later that we think it a mistake to identify the research done in universities with the Government's needs, and we have already made an argument that the latter overlooks the limitation on operational research. There is a serious "gap" in meeting needs which fall between operational research and that currently funded by the PGSF.
- iii. The desire to integrate social science research with research carried out in other outputs, and the "spreading" through all outputs of the weighting given to social goals. In the event, this recommendation was watered down in the final Government Statement. It was always something which would work only in the long-run and only if significant changes were introduced to how decisions about PGSF funding are made. Furthermore, while social science expertise is important in planning for how research results are to be taken up by eventual beneficiaries, key social science research needs of the Government, especially those in social policy, cannot be distributed across all research outputs.

While the Panel considers that the direction being taken in support of social science research funded from the PGSF is appropriate, it recommends that the priority-setting process and methodology used should be reviewed to ensure that any inherent biases are removed.

6. There are, however, some particular issues in relation to social sciences. We noted above that the PGSF emerged as one part of a comprehensive reform of the way Government manages its participation in research. That reform produced a number of Crown Research Institutes, mostly formed from research units that previously existed within DSIR and MAF. The CRIs now compete with universities and other research providers, but they have capacity to explore emerging areas of research and to undertake the preliminary explorations which are needed to demonstrate to FoRST that significant programmes and projects satisfy the priorities prescribed for the PGSF.
7. A social science CRI, Social Research & Development, was established but was unable to develop itself into a viable institution. Our terms of reference include comments on this. SR & D was always far too small to play a role in relation to the whole of social science equivalent to that played by any of the other CRIs. The range of the social sciences means that it is unlikely that any single institution could play such a role. Furthermore, the CRIs are organised around the socio-economic objectives of research rather than around a range of disciplines. A "social science" CRI would be an anomaly.
8. Furthermore, the PGSF is conceived as a device for enabling Government to set the broad directions in which it wishes public expenditure on research to go, but to insulate the choice of particular research projects from the political process. FoRST is required to use strategy processes for each of its output classes which permit end users of particular areas of research to influence the choice of

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projects, albeit still at some arms length from particular programmes and projects. We believe that in the process of strategy development and implementation, there is room for closer, continual consultation between FoRST and chief executives and policy managers in government departments, to ascertain their strategic research needs, notably in the cross-departmental and longitudinal areas where research is less appropriable by individual departments.

9. Like much else, the processes used by FoRST are very much under development. The choice of particular projects to be funded has been influenced by peer review of providers, but FoRST is developing a specialised in-house capacity for project selection and programme management, and is likely to increase over time the utilisation of research-users in the panels which advise the Board of FoRST on the outputs of which projects and programmes should be purchased. A difficulty in the case of the social sciences is that the Government is the biggest purchaser of social science research outputs and is likely to remain so. There is a challenge to be met in ensuring the independence of the PGSF in funding Social Science Research even though the Government is the principal end user of such research.
10. We found that government departments and agencies were generally unaware and unappreciative of the social science research which has been funded through PGSF. However, we also found that contractors with government departments and agencies used PGSF projects in their work. In any case, senior public servants, reviewing the research underlying policy analysis, were concerned with its reliability and validity, and not with where it came from.
11. The PGSF is still in the process of evolution. We would not want to interfere with its progress as a mechanism for "strategic research" in the sense of research which can be expected to have a pay-off in terms of government's social, economic, and environmental goals, while also being insulated from the political process in terms of the selection of individual programmes and projects.
12. We welcome the gradual increase in the allocation of PGSF funds to social science research, and would prefer that it be accelerated. We note that there is a trend towards "partnership" between the PGSF and other funding sectors, and that this approach is producing more attention to what determines the "takeup" of research throughout all the output classes of the PGSF, and this in turn is promoting social science research. We welcome these developments. We also endorse the moves which FoRST is making towards more thorough programme and project assessment, augmenting the initial peer review of proposals with post-research evaluation. We note that it is building specialist skills among its own staff.
13. Table 1 in chapter 1 showed the gap in social science required by Government which we identified between operational research and the present scope of the PGSF. Our proposal for filling it is in the preceding section. It fits and draws on current developments by FoRST. Both of the suggested main areas of research are well-defined and they would bring together a number of purchasers of research. Some of the base data would come from Statistics New Zealand but require further analysis in order to address policy needs of several departments and agencies; on other occasions, new kinds of data may be required. Whatever it is, the research will be specified so as to be both strategic and to fit needs of the actual departments and agencies which use it. To prevent unnecessary duplication, and to take advantage of FoRST's experience in the allocation of research money, staff that service the PGSF should be involved in the development of the research programmes.

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14. We welcome FoRST's relaxed approach to the definition of "science" and "social science". In particular, we believe that fitting our experience into broad international experiences and thinking often draws on what are considered part of the humanities rather than of social sciences. The FoRST position is that it is interested in research which fits the government's goals rather than with its disciplinary antecedents, including whether it belongs with humanities or social sciences. That is consistent with our position.
15. We appreciate that FoRST through the PGSF is a purchaser of research outputs. It is not a welfare agency for researchers. This is as appropriate in social science as elsewhere. Nevertheless, in the absence of a CRI with a central role in social science research, we recommend a more proactive stance by FoRST. Our recommendation is for an approach which draws on relevant capacity throughout the country, with FoRST acting in a "brokering" role, rather than for the establishment of new institutions. We think FoRST should encourage social scientists to organise themselves so as to overcome inherited prejudices and conventions and to be better able to sell research outputs. We are suggesting that FoRST should concern itself with what can be called the supply side of the industry to a greater extent than it does at present, recognising that it wants the supply side to develop, as well as to purchase products in an existing market. We observed in our enquiries that the Health Research Council has invested in developing capacity, and that this has facilitated communication between researchers and those working directly to satisfy the needs of Government.* FoRST will probably choose not to undertake and manage infrastructural developments itself but to work with and through other organisations; that is entirely consistent with our proposal.
16. In particular, we encourage FoRST to foster the development of networks and centres of excellence around priority topic areas identified through the Output 13 strategy development process. We would be especially glad to see such networks focused on Family Studies and Work Studies which are topics identified as important in that process and which relate to our proposed NSS-like structures for specifying research required by Government. The connections are not one-to-one. Family Studies is both narrower and wider than "Strategic policy populations"; it is narrower in not dealing with all the relevant populations, and wider in that the PGSF should be concerned with social trends in many contexts

* The Health Research Council not only funds research but fosters it by:

- * running consensus development conferences on particular themes;
- * offering a range of targeted fellowships;
- * creating specific opportunities in the field of Maori health with seeding grants for seeking expert advice on research proposals, small grants for the development of research ideas to the grant application stage, funds for research dissemination, and specific Maori training and research fellowships;
- * encouraging and supporting research projects related to the health of people of the south and west pacific through a specific research committee;
- * offering travel grants, conference grants and equipment grants;
- * providing funds to support facilities at host institutions;
- * offering summer studentships;
- * running methods courses; and
- * developing codes of practice and guidelines on emerging ethical issues.

(Source: *New Avenues*.) We recognise that the HRC itself is in the course of evolution, and FoRST reflects more than HRC some of the recent trends in public sector management. We are not suggesting that HRC is a model, but rather than its practices show a concern with developing the supply side with which it contracts as well as immediate market transactions, and that this is consistent with both business trends towards "preferred supplier" relationships and the existing mandate of FoRST.

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other than those of direct relevance to government policy. Similarly, Work Studies is wider than "Transition to employment" although it could be conceived as narrower in not immediately directing attention to some of the barriers to the transition specified in the latter. The networks we have in mind here are primarily concerned with suppliers. They have to be active. Effective networking requires "hassle and hustle", especially by somebody who can make links between the researchers and the demanders of their research. The benefits of networking are indirect, but undoubtedly will be greater than the costs of fostering them. It takes time and effort to capture the attention of researchers and persuade them that their own work would benefit by discussion with somebody doing related research (and indeed, at least initially, to overcome fears that research will be misappropriated). FoRST's mandate for the PGSF allows support for such centres of networks. FoRST cannot act on its own, and our recommendation requires another institution to be prepared to nominate management of such a network as a key component of its own research portfolio.

2.4 Official Statistics and Statistics New Zealand

1. Researchers and users of research are always pushing against the boundaries of existing knowledge, especially in wanting systematic and authoritative statistical information.
2. Whereas official statistics in New Zealand on economic matters are highly centralised in Statistics New Zealand, those on social statistics are much more widely shared among public agencies. Therefore, the coordination of social statistics is a much more complex issue, compounded by the extent to which a significant proportion of important social statistics are the result of administrative records held within agencies on taxation, accident compensation, police and judicial processes, and health, as well as vitals registration. A large part of household surveys in the social area are initiated without reference to Statistics New Zealand by individual policy agencies and are often carried out by market research companies.
3. New statistical databases are, in their own right, valuable national assets as sources of information for research. Access to these databases is significantly hindered in New Zealand by cost and the quality of statistical datafiles which are often very difficult to access within their host organisations, let alone by third parties. There is a need for good professional support and understanding of what are often difficult measurement concepts. Furthermore, the statistical properties of the dataset often constrain the nature of the analyses which are feasible. Cross-section datasets exist where longitudinal datasets would be preferable, in terms of analysing the dynamics of populations. Samples may exist where full-coverage is desirable. The definitions and coverage of particular sub-groups differ across surveys which should be linked, particularly in the areas of ethnicity, while core units for analysis, such as families, are differently defined in different agencies. Confidentiality is severely limiting access to most databases. The number of datasets for which researchers are able to meet the above challenges has been compounded by how recent privacy legislation has been interpreted, both within Statistics New Zealand and by other organisations. The Panel believes that within the constraints of the enabling legislation of departments and agencies involved in custody of social statistics data, there is still a significant ability to provide an environment where datasets can be more significantly used for research into New Zealand society, whether it is by public sector organisations, academic researchers or those in the community.
4. There are two proposals in which the Review Panel has taken an interest. First, a Social Science Clearing House, proposed as a joint venture between the Royal

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Society of New Zealand and Massey University, a proposal which incorporates the already established Social Research Data Archive at Massey University and which has the potential to create an analytical environment for machine readable statistical datasets of importance. Secondly, new initiatives in Statistics New Zealand to create a centre where empirical research can be supported on datasets collected either by Statistics New Zealand or other public sector organisations, probably with microdata linkages of the sort that are difficult to conduct in any other organisation.

5. In the case of longitudinal studies, especially, the demand is often of the form that Statistics New Zealand should already have been collecting the specified data for about 20 years because systematic information about social trends and consequences of interventions is required. The difficulties this imposes are obvious. In the case of focused surveys, the problem is often that different agencies want slightly different information about a particular sub-population or different agencies want information at different levels of disaggregation. Both of these sets of problems would be alleviated, but not solved, by forums that facilitated timely and encompassing discussion and that permitted adequate time and resources to designing a response to emerging needs. The solution would not be complete because researchers will always want to add to the questions to be answered, and there will never be enough resources to satisfy them. Nor will it always be possible to what questions will be asked in 20 years' time. Statistics New Zealand has moved to increase the influence on the direction of New Zealand social statistics of users of social statistics by setting up a Social Statistics Advisory Committee. The Panel suggests that more broadly-based standing committees that are more sharply focused may well be a significant next step for coordination by Statistics New Zealand. Such committees would cover demographic statistics, statistics of family and the community, social protection, and social and cultural groups.
6. Many statistics are collected within the public sector outside Statistics New Zealand that are useful for social science research, or would be if they were available or amended in some way. The issues around such collections of statistics, which are primarily compiled for administrative purposes, are not dissimilar to issues around the management of information generally in the public sector, and the Review Panel is aware of the gradual development of public sector information policy by various Government departments and agencies. Balancing the desirability of access with issues of cost and privacy is not easy, and we must give greater emphasis to the research status of administrative collections when we are concerned with these wider considerations. We do observe that it is unlikely that those responsible for the administration of public agencies, who are enjoined to use the resources allocated to them for the objectives prescribed for them by Government, will be responsive to suggestions that they should cater for research interests unless their costs are met by those who want the results of that research.

2.5 Research as an Investment

1. We have spent a considerable amount of time considering how applied social science research fits into Government's investment planning. This consideration needs to be placed in the context of the Government's overall strategy for investment in research, science and technology which was encapsulated in the discussion document, *RS & T 2010*, and circulated for comment as the Review Panel completed its task. *RS & T 2010* proposes an investment framework and decision-making structures and processes for addressing the Government's goal to increase public investment in research, science and technology from 0.6 to 0.8% of GDP by the year 2010.

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2. The relevance of the concept of investment is readily apparent in the case of Statistics New Zealand, where ministers are familiar with choices such as that between increasing the capacity of Statistics New Zealand to implement a new survey and approving the purchase of computer equipment to facilitate manipulation of data after its collection.
3. It may not be so apparent that departments and agencies are faced with similar questions about their operational research. They have to think ahead about what policy issues are likely to be exercising governments in the medium term future, and putting in place the processes for collecting and processing information so as to be able to meet those demands. They therefore have to think about the relative priority to be accorded to delivering their current outputs and preparing to deliver future outputs, and they have to negotiate purchase agreements with ministers which enable them to strike the appropriate balance.
4. We explored the way that other government investment decisions are monitored. They provided no easy answer. Essentially, investment decisions are monitored by checking that appropriate processes have been followed, and that the investment decisions reached are explicable in terms of "best practice" in the relevant industry. In the case of the operational research of government departments, the mechanism analogous to the first of these methods is the performance of the chief executive in negotiating the departmental purchase agreement, and implementing it through the departmental corporate plan and personnel management. Some of the specific projects of the Audit Office also facilitate appropriate monitoring. There is no industry to provide "best practice" benchmarks.
5. We are aware that work is proceeding on how the "ownership interest" of Government in its departments can be better monitored. It will no doubt include consideration of whether adequate investment is being made in research. We do note that expenditure on research in social policy areas is a much lower fraction of total government expenditure in that area than is the case in some others. This is no more than suggestive, as the nature of expenditure differs, especially in the case of transfer payments, and because research should be judged against its likely pay-off rather than entirely by a mechanical comparison with total expenditure. Nevertheless, we believe that there should be more research underlying social policy decisions.
6. Our sense is that chief executives in the major departments and agencies of interest to us are aware of the need to strike an appropriate balance between research and satisfaction of their contracts to deliver the current year's outputs. Ministers have to strike a balance between their commitment to future cabinets (of which, for various reasons, they may not be members), and their shared responsibility for maintaining fiscal responsibility. Our enquiries suggest that they approach this obligation very responsibly. We note the care with which most ministers distinguish between the political views of researchers (which are sometimes flamboyant) and the quality of their research.
7. We are unable to provide any simple test of whether the Government is investing sufficiently in social science research. Most judgements have to be made at a more disaggregated level, asking whether departments are being managed with optimal attention to investing in knowledge required for future policy development. We can see some areas where we are confident that we are not investing as much as is optimal. Our view of the most important gaps in the Government's investment in applied social science research is evident in our recommendations on the provision in output pricing for participatory research, on the place of evaluation in policy development, and for the creation for NSS-

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like structures for particular areas of importance to the Government's SRAs which require greater collaboration between PGSF research and operational research that crosses departmental boundaries.

Chapter 3

Ensuring Adequate Supply of Applied Social Science

- i. New Zealand is, and always will be, an extremely small supplier of social science research in the global context. In the emerging global marketplace, policy makers already access the international supply of social science research in a variety of ways. However, the distinctive features of New Zealand society mean that there is still a need for local knowledge and expertise. (And New Zealand's contribution to the international supply, while small, is not negligible.)
- ii. The government's demand for social science capacity and the objectives of suppliers of social science research are better integrated than often thought. Government is mostly able to get what it is prepared to pay for, and social science suppliers find markets for well-developed services.
- iii. Most problems of communication are essentially issues of project management. There is widespread recognition among both government departments and social science researchers of the importance of project management, especially the investment of adequate time to ensure a common understanding of what is required and how closely it can be achieved.
- iv. Any improvement to the communication between Government and social science researchers has to balance two desired characteristics: a greater openness to all available researchers, and the development of "preferred supplier" relationships with researchers who have earned the trust of research commissioners.
- v. "Clearing house" arrangements, especially electronic ones, can help, but they have to be managed actively and not be treated as passive institutions. The problem is not just the conveying of information. Rather the greatest underlying difficulty is in ensuring understanding (among both commissioning departments and researchers) of the relevance of specific research results to more abstract policy issues.
- vi. Universities are "primarily concerned with more advanced learning, the principal aim being to develop intellectual independence", and their social science research is properly part of that objective. It is desirable that the overlap which it has with the social science research needs of government departments should be exploited, but the latter should not dominate the former.
- vii. We need more communication from departments and agencies to academics and vice versa on how practical research problems illuminate general concepts and promote abstract understanding, and on how abstract understanding provides depth to discrete research results.
- viii. Personnel management in government departments has improved in recent years. It could be improved further, most obviously by clearer signals to social science training establishments of what is required to develop recent graduates in social sciences into effective researchers.

3.1 The Social Science Industry

1. As with other areas of science, New Zealand is, and always will be, an extremely small supplier of social science research. In many areas of social science research, New Zealand will never have the resources to undertake large-scale research projects which are possible in many larger nations. Specialisation is desirable. In the emerging global marketplace, there is increasing scope for research to move across borders at least as easily as goods, services, investment, and people. Policymakers already access this international marketplace for social science research through a variety of means, including searches of electronic databases, participation in international forums, overseas visits, contracting in overseas expertise, and linking into New Zealand university expertise which is in turn linked to international thinking. However, the Panel recognises that while the supply of social science research has increasingly become an international industry, the distinctive features of New Zealand society mean that there is still a need for local knowledge and expertise. (It also recognises that New Zealand researchers can contribute significantly, if modestly on a world scale, to international knowledge, but the Panel's concern is with the Government's need for social science research rather than other aspects of the social science industry.)
2. The NZ Census of Population reports on three occupations that use social science research skills: economist, market research analyst, and social scientist. The number of economists and market research analysts grew rapidly in the 1970s, and all three grew during the 1980s. All have grown rapidly in recent years. In 1991, there were 735 economists, who although spread across all industries, were employed mainly in two sectors, personal and social services (government agencies and tertiary education) and financial and business services. There were 1755 market research analysts employed in a wide range of industry areas, and nearly 1200 social scientists working principally in central and local government, tertiary education (including many applied settings such as management, nursing and planning studies), and in the voluntary welfare sector. About 10% of social scientists were located in a wide variety of commercial settings, especially finance and business services. About 80% of economists and social scientists, and 40% of market research analysts, have graduate or postgraduate qualifications.
3. The Panel was impressed by the proactive approach taken by the Health Research Council to developing competencies in critical areas of need which would not otherwise have been met, and has recommended elsewhere that a similar approach be undertaken by FoRST. (Para. 2.3.15) The Health Research Council's approach to the development of Maori research capability also has much to recommend it.

3.2 Government's communication with social scientists

1. We observed earlier that the social science content of the operational research of government departments and agencies is increasingly determined by the requirements of policy development. This is the case even for some departments which are thought by some contracted researchers to be responsive to proposals unrelated to the policy agenda. Pressure for effective use of all public sector resources is unlikely to decline, and therefore we do not expect any reversal in this trend.
2. It is therefore most important that policy managers and researchers ensure that they have a common understanding of what the research is intended to do. It will

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not always be possible to provide the information and analysis which policy managers would like, especially with the level of reliability and validity which is desired. It is, however, possible to avoid research whose design is such that it can never produce what is required.

3. The principal requirement is that those commissioning research and those contracting to perform it should invest enough time and effort to ensure that there is a common understanding of what is to be done, what is likely to be the result, and what risks are being taken. This is true whether the research is commissioned or is to be performed by in-house staff.
4. The information available to the Panel suggests that this is better understood by specialist research suppliers, whether commercial or otherwise, than it is by academic social scientists. We think this is a transitional feature, if only because researchers who fail to adapt to a changed environment will not find it easy to secure contracts. The strategic policy research which we propose in paras 2.2.13-19, which will have longer time-frames, will make it easier for tertiary teachers of the social science disciplines to contribute to the policy concerns of government.
5. Contracting for research is a market transaction, explicit or implicit, much more like contracting for consultancy advice or other professional services than it is like the purchase of a commodity whose use is instantaneous. It is therefore likely to be influenced by the existence, or otherwise, of trust between purchaser and supplier. The Panel expects that those who commission research will develop "preferred supplier relationships" with researchers who have earned and retained their trust, and that researchers will seek contracts from commissioning departments and agencies which have earned and retained their trust.
6. There is some tension between this trend in the development of relationships and the traditional reliance of the public service on open contracting as a mechanism for demonstrating good management of public funds. This is a tension to be managed rather than a conflict to be resolved; the objective is to have a group of "preferred suppliers" which is open to the entry of new members. Among the researchers we consulted, the existence of this tension was recognised. Some thought that there was too much reliance on open tendering so that investing time in developing a good mutual understanding with a contracting department or agency was not rewarded because the benefits could not be appropriated against competing tenderers who were allowed to free-ride on the greater understanding of the commissioning manager. Others put their emphasis on the reliance of departments and agencies on existing knowledge of potential suppliers so that new entrants faced difficult barriers.
7. Criticisms of communication between managers and researchers went beyond this tension. In the extreme, there were anecdotes about purported contractors who sought advice of potential suppliers only to use their advice to design in-house research. More common, and with more persuasive power, were observations that departments and agencies expected more unpaid time and effort in exploratory discussions than could be justified by the return from a successful proposal. This clearly points towards the desirability of arranging contracts of a larger size where this is possible.
8. These criticisms apply with only moderate amendments to PGSF research too. Some suppliers or potential suppliers complained that they could not discover what kind of proposal was most likely to be successful, and there is some game-playing in the writing of proposals. The Panel has some sympathy with these complaints, but it is not easy to write strategy statements that communicate successfully with a wide range of researchers. The information available is more plentiful than had

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been read by some of the complainants, and the communication of FoRST is improving over time.

9. Managing research projects in the social sciences is a new experience for many of those now engaged, whether through commissioning research or through supplying research to a contract. The information secured by the Panel suggested that there is more common understanding among those who commission research and those who supply it than might have been expected and that we were witnessing a transition which is moving in the right direction.
10. In addition to managing contracts in units which allow for adequate preparation and appropriate monitoring of responses to the risks involved, the single most important step available to government departments is to ensure that good information is actually available to researchers. Those who interact directly with researchers must have a thorough knowledge of the expectations of the policy managers who will use research results. Their identity must be known to actual and potential researchers. This might be thought to be an obvious point, but changes of personnel in departments and agencies can be very disruptive, especially to researchers outside Wellington who cannot readily use personal contacts. And it is quite clear that there has not in the past always been adequate briefing when staff were replaced.
11. The ownership and custody of information that is produced, and access to it, is also a critical element of contract research. Often, significant research projects seem to fade out of existence after the news media has stopped reporting them. Access to the methodology to evaluate the quality of research often conflicts with commercial confidentiality. In many areas, significant biases in methodology are unnoticed because they are not reported in a consistent framework. Statistics New Zealand should be more vigorous in its efforts to coordinate social statistics in terms of the integrity of social statistical data collections, but the best point to make improvements is in the design of research contracts.
12. In the context of improving communication, the principal requirements of researchers are respect for the skills of policy analysts and managers, willingness to understand their requirements, realism about their capacity to supply what is needed through research, and commitment to honouring the terms of contracts agreed to. Researchers who think that they should be able to control the judgement of policy analysts and managers are unlikely to be good suppliers. It is difficult to understand why those who think operational research is a matter of supplying support for predetermined political prejudices should want to contract with government departments and agencies at all.

3.3 Social science research in the tertiary education sector

1. A large fraction of the social science capacity in New Zealand is located in the tertiary education sector, especially the universities. It is less obvious that there is within universities a large fraction of the country's capacity to supply the operational research of government departments and agencies and of PGSF social science research.
2. Universities are enjoined to engage in high level teaching and research. In the words of the Education Act, they "are primarily concerned with more advanced learning, the principal aim being to develop intellectual independence". They have social science capacity in order to achieve this objective. It is not the same objective as either the operational research of government departments and agencies or the Public Good Science Fund.

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3. The objectives of other tertiary institutions such as polytechnics, colleges of education, and whare wananga are different from those of universities, but the same observation holds. Where they have social science capacity, its purpose is not that of operational research or the PGSF.
4. Non-identical objectives may nevertheless overlap. Operational research and PGSF research can be the basis for the climate of research which is required for learning appropriate to degree-level courses. It has been observed in the USA* that the efforts of the scientific community can be distorted by what is called the "Nobel Prize syndrome" - a desire for a strikingly original idea which is of necessity available to very few researchers not only because it is highly selective but because it requires talents and opportunities which are in fact available to only a few researchers. Most researchers would contribute more to the advancement, maintenance and dissemination of knowledge through directed research. They would thereby also contribute more to other objectives, and they would experience more personal satisfaction. Social science may be less subject to the Nobel Prize syndrome than some other fields of research because it is more cumulative and less driven by single identifiable innovations. Nevertheless, we would probably benefit in terms of educational objectives as well as other objectives if more of our social scientists choose to contribute to operational or PGSF research and were able to do so.
5. The New Zealand social science capacity is always going to be a very small component of the world capacity. Only a few of the major scientific developments in the relevant disciplines are going to occur in New Zealand, although the Marsden Fund enables New Zealand social scientists to increase what is already a not insignificant contribution. On the other hand, any social science concept, technique or analysis developed overseas will almost certainly require adaptation before it can be employed in New Zealand, whether by the government or by the local private sector. Exploring that adaptation is likely to be the source of many New Zealand contributions to the evolution of the international literature. And it is also likely to be an appropriate component of operational or PGSF research, especially perhaps the latter.
6. Universities currently secure their funding primarily from student fees and from contracts with the Ministry of Education which depend most on student numbers (but differentiate also by courses of study). In the case of the social sciences, the "funding windows" used in contracts with the Ministry mostly apply also to other tertiary institutions. There is no explicit reference to research in these contracts, and there is no explicit monitoring of research output. The universities and other institutions would respond that they are accountable through such devices as research reports, but they are hardly the kind of accountability mechanism which apply to most public sector activities. However, whatever monitoring mechanism is eventually evolved, it is unlikely to be a simple extension of the monitoring appropriate to the PGSF (which is itself still evolving), and still less the monitoring appropriate to operational research. It should, however, recognise the overlap between these different kinds of research.
7. It is important to recognise that the overlap is not only that operational and PGSF research can be part of the research appropriate to degree-level learning as can the research managed by our proposed new structures. (See paras. 2.2.13-19.) Equally significant is the way that these forms of research need to draw on and be informed by research which explores, adds to, and adapts the conceptual and methodological thinking which provides the impetus for how disciplines develop

* Sommer J (1988) *Sketches of the American Scientist* (Sigma Xi, The Scientific Research Society Inc.)

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and which eventually helps to determine what are recognised as issues calling for policy responses.

8. The Panel recognises that university managements face considerable challenges as they adapt to demands that universities, like other public sector institutions, increase the effectiveness with which they use resources provided by the public. They have to meet expectations of more effective learning and better research output which are increasingly being formed by different bodies, while as institutional managers they have to provide for work programmes of integrated teaching and research for members of their staffs. They have to counter feelings among their staffs that all academics should be treated equally, and even that universities should still be havens for disinterested scholars protected from the demands of the world around them. In practice, equality of research funding for all academics would almost certainly remove support from those whose research currently attracts funding more than it would add to those who get little support beyond their salaries. Only a minute part of the New Zealand university system could be considered remotely equivalent to institutions like the Princeton Institute for Advanced Studies where highly selected scholars are left to pursue their own agendas. (It is noticeable that even the Institute of Advanced Studies at the Australian National University is less and less insulated from outside monitoring.)
9. A concrete example of the problems faced by university managements is the way that teaching schedules have to be reconciled with commitments of staff time to projects financed by the PGSF (and now by the Marsden Fund). Individual university staff have some very specific capabilities, and teaching programmes cannot always be maintained by simply substituting one staff member for another or by employing temporary staff. Furthermore, an important source of frustration for university social science researchers is the operation of in-house peer review procedures before proposals are forwarded to FoRST. However, FoRST and the universities are right to seek a sensible allocation among themselves of the cost of evaluating proposals. FoRST processes could be undermined if there were a large number of small proposals which had little chance of success. University social scientists should seek opportunities to organise research which fits the concept of "strategic research in large chunks", and university managements should ensure that in-house processes do not discriminate against social scientists.
10. As with other institutions, university management has become more demanding than it was, and managements which cannot cope should give way to managements that can.

3.4 Eradicating Barriers

1. Although some researchers dislike having their work described as a form of commercial activity, social science providers resemble other consultancy services. Private sector firms have realised this, including the importance of developing specific research skills and building "preferred supplier" relationships with their clients.
2. "Preferred supplier" relationships necessitate mutual satisfaction with successive contracts. Private sector suppliers are therefore as anxious that their research should be found useful by their commissioners as academics who want their research to have an impact on government actions. They differ in that their livelihood depends on their reputation with those who commission research. The tension between wanting to be "successful" and to be true to such research values as honesty, respect for human ethics, and caution about how much weight can be

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placed on the evidence, is therefore much more transparent. The strongest pressure for high quality research is the desire for a reputation for producing work which stands the test of time. From the Government's point of view, the critical issue is the quality of those who contract for research rather than the management of research suppliers.

3. We have observed that departments and agencies have chosen different management organisations and that we have no basis for saying that they have been mistaken in doing so. However, it is clear from ministerial reactions to the research underlying advice tendered to them, from the view of senior public servants about research in their own departments and in others, and from evaluations from outside the public service, that there is room for improvement in the management of research and researchers within the public sector. This will probably always be true.
4. Trends in policy formulation are intensifying the research problems facing government departments. To respond adequately, they need higher levels of social science skills than used to be the case. Policy managers and analysts need to enhance their capability for recognising the limitations of the research available to them and to choose means of pushing back those boundaries. This includes ensuring that they have capacity for the "life-long" education of researchers employed in the public sector. They also need to recognise that new graduates require a great deal more training before they can be independent researchers.
5. Much more use could be made of modern communication methods as departments and agencies seek the appropriate balance between preferred suppliers and new entrants. However, electronic bulletin boards are probably best conceived as a supplement rather than replacement for newsletters and journals. The Panel believes that what is required is a set of communication systems each element of which has a clear focus and is targeted to appropriate researchers, while the set caters for the diversity of social sciences. Such a set of systems should be managed by an umbrella organisation to capitalise on available synergies.
6. Communication could be improved through the establishment of a social science research clearing house. Such a clearing house would establish a set of gateway mechanisms for two-way transfer of information and data between policy developers and researchers and among researchers themselves. These mechanisms should make extensive use of modern communication technologies. (The systems which already exist in a few specific fields should be given an incentive to join the wider clearing house.)
7. These arrangements should be implemented within a proactive "brokering" framework that facilitates the interaction of policy developers and researchers in terms of both research products and expressed policy needs. The "brokerage" framework should also bring together researchers across various sectors in relation to policy issues identified within the clearing house.
8. These arrangements, and the framework within which they are implemented, would resolve some of the problems identified concerning the communication of PGSF research. (See 2.3.10). In addition, through its data collection and dissemination functions, the clearing house would meet some of the PGSF's obligations in relation to databases and collections of national importance. Concerns raised by government departments and agencies about the lack of basic data and a social science knowledge repository would also be addressed. (See 2.1.9).
9. It is essential that those involved in constructing these arrangements have expertise in relation to social science research, policy development and the new communications technologies. Clearing house management and staff must be

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committed to a proactive role in bridging policy development and research interests.

10. The Review Panel has been provided with information concerning the Social Science Research Clearing House proposed as a joint venture between the Royal Society of New Zealand and Massey University. This proposal specifies a configuration and has a potentially proactive "brokering" approach consistent with the points made above. It also meets some of the infrastructural needs of the social sciences as recommended in *New Avenues*. It is useful that the Clearing House will incorporate the Social Research Data Archive at Massey University which presently caters for machine readable statistical data sets. (See para 2.4.4). The Review Panel endorses the proposal and recommends that it be supported, with the firm proviso that the Clearing House be developed and managed actively.
11. We address the need for interdepartmental research in our "NSS-type" proposal. (2.2.9-19)
12. We address the need to reconcile the claims of research with those of designers and compilers of administrative data collections in a preceding section. (2.4.6)

Chapter 4

Conclusion

- Integrating the Government's commitment to raise public expenditure on research, science & technology from 0.6 to 0.8% of GDP by 2010 with the normal budgetary processes raises issues which go well beyond the brief and competence of this Review. We have designed our recommendations so that they do not require any change to the existing procedures for high-level budget decisions. Any change to a more direct focus on the aggregate level of research, science & technology expenditure would facilitate rather than complicate their implementation.

1. Over the last decade, the government has reformulated its budgetary processes. Especially through the Public Finance Act, 1989, but also with the Fiscal Responsibility Act and the most recent addition of the strategic management processes inherent in SRAs, it has based its expenditure decisions on purchasing outputs rather than funding good causes. The degree of understanding of this change varies even among ministers (as does the level of commitment to the reform). It is well understood by senior public servants, and less well so by lower level public servants although this is changing. It is not widely understood by social science researchers outside the public service, especially by academic social science researchers.
2. By inclination and necessity, the Review Panel has understood that its recommendations have to be consistent with the reformed public sector management system.
3. One of our difficulties is that within the public sector, "research", and *a fortiori* "social science research" is not an output, but an input into the outputs which government purchases. The public sector management system is not going automatically to provide a measurement of the topic of our concern. The difficulty is not insuperable; many concepts which are important are not measurable directly. The difficulty is real in that we often have to deal with indirect and approximate measurements.
4. This is now less of a problem than it was when the PGSF was established. Then there was some thought that administration of all public good science could be centralised so that research funds could be allocated by a simple mechanism. The thought lasted longer than it should have since it was soon clear that operational research could not be separated from the policy development and service delivery to which it related so that the meaning of "public good science" was less simple than was assumed by some proponents of a centralised allocating system for all public research. Furthermore, the Health field was excluded from PGSF.
5. The debate about the relevance of the economic concept of "public good" was also unproductive. In the event, FoRST developed a concept of "strategic research in large chunks" which is eminently sensible although there needs to be some flexibility for including small projects. We understand that FoRST, as manager of the PGSF, is developing its role as one of several possible purchasers of strategic research on behalf of the Government. We encourage these moves towards the achievement of a more pluralistic funding system. It is clear to us that FoRST processes are recognised as providing valuable quality assurance.
6. We therefore have a capacity to add PGSF purchases of social science research to operational social science research, albeit in an imprecise manner. We can form similar assessments of other kinds of government purchases of social science research, such as the activities of university researchers outside contracts with government departments and agencies or the PGSF. Research in Vote: Education is considered in section 3.4.
7. The Government has committed itself to a strategic goal of increasing public expenditure on R & D from 0.6 to 0.8% of GDP. We envisage that this will be achieved by monitoring expenditure on the "science envelope" - making assessments on total expenditure on research in the manner defined above - and revisiting purchases of outputs if this total expenditure does not comply with a profile which satisfies the government's commitment. That is, we do not expect any significant change in budgetary processes at a broad level.

Conclusion

8. We do, however, expect a significant increase over time in the government's purchase of research. We are confident that as Government purchases research which has a pay-off in terms of its economic, social and environmental goals, this will have a larger social science component. We do not think this should be an objective of Government; rather, it should be an implication of decisions made for other reasons. Thus we do not propose any process of monitoring changes over time in the purchase of social science research.

Recommendations

1. Government should recognise that it is the principal beneficiary of applied social science research. (1.2.5)
2. Cabinet should reinforce existing guidelines for including provision for evaluation in policy proposals and request the State Services Commission to give explicit attention to the implementation of these guidelines as it appraises the performance of chief executives. (2.2.5)
3. The pricing of policy advice outputs should be revisited to ensure that there is adequate financial recognition of the cost of "participatory research". (2.2.6)
4. Cabinet should establish Committees along the lines of those used for National Science Strategies for research into "Strategic policy populations" and "Transition to employment". Cabinet should appoint convenors to initiate discussion with participating departments and agencies about membership and appropriate funding arrangements. (2.2.13-19)
5. Cabinet should reiterate the mandate of FoRST to be proactive about developing the social science industry so that needs for social science research can be met more easily in the future than they are now. In particular, FoRST should facilitate initiatives to establish networks of researchers and cumulation of knowledge in family studies and work studies. (2.3.15-16)
6. Cabinet should give sympathetic consideration to the argument that Government should buy more services from Statistics New Zealand in the form of research which is strategic for the committees referred to in recommendation 4, and in support structures for researchers using statistical datafiles. (2.4.3-6)
7. Cabinet should invite government departments and agencies to ensure their research connects with their policy development needs, especially those central to the SRAs of the Government. (2.1.14-15; 2.2.4)
8. Cabinet should reiterate the importance of research to its "ownership interest" in Government departments and agencies. Departments and agencies should be able to show that they are investing so as to be able to meet future demands from governments. Good investment will be demonstrated by systems to ensure an adequate supply of good quality staff, sound systems for the management of research contracts, sufficient in-house training of researchers and policy analysts, and participation in clearing house and fellowship schemes. Cabinet will want to compare the relative effectiveness of departments and agencies in these respects as it monitors progress towards raising public investment in research and development from 0.6 to 0.8% of GDP. (2.1.16, 3.2.3-7, 3.2.10-11, 3.4.5-10)
9. Cabinet should note that there are no explicit mechanisms for the purchase of research outputs from tertiary education institutions, and that if these were developed they should relate to the educational objectives of those institutions. PGSF research and operational research should be purchased through mechanisms other than Vote: Education. (3.3.6)

